S. HRG. 102-5 (Pt. 1)

NATIONAL ENERGY SECURITY ACT OF 1991

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

ON

S. 341

TO REDUCE THE NATION'S DEPENDENCE ON IMPORTED OIL, TO PROVIDE FOR THE ENERGY SECURITY OF THE NATION AND FOR OTHER PURPOSES

AND ON

THE ADMINISTRATION'S NATIONAL ENERGY STRATEGY

FEBRUARY 21, 1991

PART 1

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HEARING ON THE ADMINISTRATION'S NATIONAL ENERGY STRATEGY

THURSDAY, FEBRUARY 21, 1991

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 9:40 a.m. in room SD-366, Dirksen Senate Office Building, Hon. J. Bennett Johnston, chairman, presiding.

OPENING STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM LOUISIANA

The CHAIRMAN. The committee will come to order.

Today the committee will receive testimony on the administration's National Energy Strategy. We are very pleased to have Admiral Watkins here, the Secretary of Energy, with whom we have been in close contact over the past months and particularly in the past weeks.

We are very pleased that he is accompanied by my former colleague and esteemed friend, Henson Moore.

We are very pleased to have Linda Stuntz here, who has worked, I understand, around the clock for months on the National Energy Strategy, and Steve Wakefield, who has done outstanding work also in this field.

Yesterday's announcement of the NES was the culmination of some 18 months of hearings and study and work by the Department of Energy. Secretary Watkins and his staff are to be commended for their dedication to this effort to define a national energy policy. Secretary Watkins also deserves commendation for elevating the importance of energy policy within the administration.

As I have often said, we must have an energy policy that integrates the tradeoffs between energy, the economy, and the environment. Unfortunately, we do not now have such a policy. However, we have learned from the past and we have learned from Saddam Hussein. We know that there is no single energy initiative that can solve the whole energy problem and that we must not be overly reliant on any foreign source for our energy supplies. Rather than having a one-word energy policy—a policy based on "import," our policy should be one that is "made in America."

To further this objective, Senator Wallop and I have introduced the National Energy Security Act of 1991. This legislation is a comprehensive, and we believe, balanced bill that can serve as the foundation for a bipartisan national energy policy for the 1990's and beyond. It is a made-in-America energy bill. I am pleased to have worked closely with Senator Wallop in crafting the bill, and I look forward to continuing our joint efforts on this important legislation.

While we have not yet had an opportunity to review the NES in any detail, I am sure there will be concepts in the administration's proposals that we can incorporate and, indeed, I am sure that the major proposals have already been incorporated in our bill, although we have not received the proposed legislation accompanying the NES.

We look forward to continuing our very close working relationship with Admiral Watkins and his staff in considering the NES, and be assured we intend to move forward quickly with this legislation. We have announced a schedule of nine hearings on the bill over the next 4 weeks. We plan to move expeditiously to committee markup and to consideration of this bill by the full Senate. In fact, it is our hope that we can be in markup by early April and that we can finish this bill and have it on the floor during the month of April.

The need for a sound policy to address the difficult issues posed in the energy arena has never been more apparent than it is today. Action will require initiative, risk, and perseverance. Surely the Middle East crisis should give us the resolve needed to establish and implement a national energy policy. Three energy crises within a period of 18 years is enough. It is too much. It is avoidable. It can be avoided. We must avoid it. The enactment by the Congress of a national energy policy will avoid that.

Once again, I thank Secretary Watkins for being here and look forward to hearing his testimony on the administration's national energy policy.

[The prepared statements of Senators Bingaman and Shelby, the texts of S. 341 and S. 570 follow:]

Prepared Statement of Hon. Jeff Bingaman, U.S. Senator From New Mexico

Mr. Chairman, today the Secretary of Energy is to provide us with some of the details of the Administration's proposal for a National Energy Strategy. I hope that the Secretary will be able to clarify some of the elements of the National Energy Strategy for us because it appears to me the document raises more questions than it answers.

The stated objectives of the Strategy, namely achieving a balance among our need for energy at reasonable prices, protecting the environment, maintaining a strong economy, and reducing our dependence on unreliable energy suppliers, are laudable. One would be hard pressed to argue with any of them. Whether the measures proposed will even marginally allow this country to attain those objectives is another question.

The "cornerstone" of the Strategy is "reliance on the market to determine prices, quantities, and technology choices." In fact, the strategy makes it clear that market forces alone will determine our national energy policy. The Bush administration's policy in this respect mirrors that of the previous administration. It may be well to remind ourselves where this approach has taken us. In the early 1980's, this country imported less than 30 percent of its oil. When the Bush administration took office in 1988, the percentage was up to 35 percent. Today it is 45 percent. Will market forces change this trend?

I want to return to the reasons for having an energy strategy in the first place. An obvious reason is that the current policies are unsatisfactory. That is an understatement. The severe problems this nation faces today, from the economic and political crisis represented by the war in the Gulf to the potential for global climate change, require a realistic view of the future and inspired leadership. We must eschew dogma in favor of practical and realistic measures which will allow us to achieve our objectives. Required are major changes in the patterns of energy consumption and supply in this country. Further, these changes do not have to, and cannot, be made at the expense of the quality of life—whether economic or environmental. Many of the changes to which I refer involve reduction in energy consumption. The American people are strongly in favor of reducing consumption through conservation and adoption of alternative energy strategies. If they are ready, why aren't their leaders?

The Administration has articulated a set of objectives for the National Energy Strategy which are commendable. What it has not done is take the next logical step and establish concrete goals. Rather than set goals, the Administration prefers to make projections of where we will be in the future. Mr. Chairman, you may recall, the letter which was sent to you by the Department of Energy on the auspicious day of January 16th of this year. In that letter, you were informed that the Administration would not provide the "energy targets" for net imports, domestic production, and end-use consumption that are required by law to be transmitted to the Congress every two years. Rather the Administration would provide projections because, and I quote, "Government prescribed targets are inconsistent with the Bush Administration's policy of allowing energy markets to determine energy supply and demand."

Mr. Chairman, I have to take issue with the Administration's refusal to set goals. Goals are not established as a constraint, but to provide direction. The real difference between mere projections and effective goals can be summed up in a word—commitment. The National Energy Strategy purports to provide a roadmap to a more secure and cleaner energy future. Frankly, it is difficult to know whether we have the right roadmap when we don't know what the destination is. That is what this country needs to know—not where we might be, but where we should be. Goals tell us what we want our destination to be.

I plan to introduce legislation shortly which lays out the kind of broad goals we need to serve as the basis for an effective energy strategy. The goals are set for the year 2000. It would be useful if we were able to set goals beyond that period of time, but I want to be realistic. By then there will be technological breakthroughs which we cannot anticipate. Let us set new goals for ourselves at that time. For now, let us concentrate on attaining these goals.

There are only four goals in this bill. They are:

(1) to reduce overall oil consumption in the U.S. while decreasing the percentage of oil that is imported;
(2) to reduce the use of fossil fuels;
(3) to increase energy efficiency in all sectors of the economy; and
(4) to reduce carbon dioxide emissions.

The kind of targets I am proposing are realistic. In fact, in many cases they parallel some of the "projections" we see in the National Energy Strategy. They are consistent with environmental goals. Moreover, they are attainable, but only through concerted and consistent efforts by all concerned. While the bill does not dictate the paths by which the goals are to be reached, the nature of the goals will not allow "business as usual". To attain them will require aggressive action and innovative approaches to energy policy. I regret the Administration has not chosen to follow that path. I hope this committee will take such action.

PREPARED STATEMENT OF HON. RICHARD C. SHELBY, U.S. SENATOR FROM ALABAMA

Mr. Chairman, I am pleased to participate in this hearing today. I welcome the administration's National Energy Strategy. This proposal has been in the making for over a year and I congratulate President Bush and Admiral Watkins for their hard work and leadership in presenting this plan to contribute to the formulation of a comprehensive, national energy policy.

Although we have had warning signals in the past, the current conflict in the Gulf has made us painfully aware that we must not delay to explore ways to reduce our dependence on foreign oil! Particularly in the historically unstable and volatile Middle East. The administration's proposal provides for the development of new technologies that will enhance our production and recovery of existing, as well as potential sources for domestic oil. The proposal also gives serious consideration to the research and development of nonconventional fuels, which must be a key component of any energy policy in the national interest.

Two weeks ago, the distinguished Chairman and ranking member introduced another national energy strategy bill, the Energy Security Act of 1991. While I am pleased to see that there are several areas of the administration's proposal and the Energy Security Act that complement each other, I believe that S. 341 is more far reaching in addressing our Nation's need to reduce our dangerous reliance on oil imports.

One of the greatest tasks facing Congress is the passage of bipartisan legislation for an energy policy to aid in securing our Nation's future. Sacrifices will be required from all sides. Difficult as it may be, we must rise to meet the challenge. With this in mind, I am confident that differences that may arise as we consider this issue can be resolved in ways that will lead us to passage of a consensus based, economically and environmentally sound national energy policy.

102D CONGRESS
1ST SESSION

S. 341

To reduce the Nation's dependence on imported oil, to provide for the energy security of the Nation and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 5 (legislative day, JANUARY 3), 1991

Mr. JOHNSTON (for himself and Mr. WALLOP) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To reduce the Nation's dependence on imported oil, to provide for the energy security of the Nation and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be referred to as the "National Energy Security Act of 1991".

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TITLE I—FINDINGS AND PURPOSES

SEC. 1001. FINDINGS.—The Congress finds that:

(1) the achievement of energy security for the United States is essential to the health of the national economy and the maintenance of national security;

(2) as an energy-rich country that nonetheless depends on oil imports for an increasing share of oil use, United States energy security requires that the nation reduce oil consumption, maximize domestic oil produc-

tion, and particularly for transportation purposes, encourage use of energy sources other than oil; and

(3) this can be accomplished with no significant adverse effect on the environment, and will stimulate economic growth, improve the competitiveness of United States industry in the global market, and reduce the possibility of global climate change.

SEC. 1002. PURPOSES.—The purposes of this Act are to:

(1) slow the nation's increasing dependence on imported oil over the short-term, and in the long-term significantly reduce that dependence;

(2) encourage more efficient use of energy throughout the economy, including improvements in the industrial, commercial and residential sectors, increasing energy efficiency in Federal energy management, and encouraging more efficient energy use by electric utilities;

(3) encourage development and deployment of renewable energy sources in the United States and on an international basis in lesser developed countries;

(4) streamline the hydroelectric licensing process and encourage hydroelectric development at Federal dams;

(5) enhance the role of coal and clean coal technology in meeting the nation's energy needs;

(6) establish priorities for Federal energy research, development, demonstration, and commercialization;

(7) encourage the development of domestic energy resources on the Outer Continental Shelf;

(8) provide for oil and gas exploration, production, and development in the Arctic National Wildlife Refuge in Alaska in an environmentally sound manner;

(9) encourage increased utilization of natural gas and other domestic energy resources to displace imported oil and meet domestic energy demand in a manner consistent with environmental values;

(10) reduce the consumption of oil in the transportation sector, and encourage development and use of alternative energy sources, particularly for transportation; and

(11) encourage the production and use of nuclear power by providing for the commercialization of advanced nuclear reactor technologies.

TITLE II—DEFINITIONS

Sec. 2001. Definitions.—As used in this Act the term—

(a) "Secretary" means the Secretary of Energy, unless otherwise provided;

(b) "joint venture" has the same meaning as set forth in section 3 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (Public Law 101–218), and joint ventures authorized herein shall be conducted pursuant to that Act; and

(c) "lesser-developed countries" shall include, but not be limited to, Eastern Europe and the Soviet Union.

TITLE III—ENERGY EFFICIENCY

Subtitle A—Industrial, Commercial and Residential

SEC. 3001. BUILDING ENERGY EFFICIENCY STANDARDS.—Title III of the Energy Conservation and Production Act, (48 U.S.C. 6835) is amended by:

(a) In section 304(a)(4), striking the words "Federal buildings" and inserting in lieu thereof, "Federal buildings and public housing,";

(b) Striking the existing section 306 and inserting in lieu thereof the following:

"SEC. 306. COMPLIANCE.

"(a) FEDERAL BUILDINGS.—The head of each Federal agency shall adopt such procedures as may be necessary to assure that the construction of any new Federal building meets or exceeds the applicable energy efficiency performance standards promulgated pursuant to section 304(a).

"(b) PUBLIC HOUSING.—Effective three years after the date of the enactment of the National Energy Security Act of 1991, the Secretary of Housing and Urban Development shall adopt such procedures as may be necessary to assure that any newly constructed public housing unit meets or exceeds the applicable energy efficiency performance standards promulgated pursuant to section 304(a)."; and

(c) Redesignating the existing section 308 as subsection (a) and adding at the end thereof, the following new subsection:

"(b) The Secretary may provide financial assistance to the States, and to units of local government that have jurisdiction over building energy conservation standards, and which intend to adopt energy conservation standards consistent with the standards promulgated under this Part for commercial buildings, to assist them in furthering the design and construction of energy efficient commercial buildings.".

(d) CONFORMING AMENDMENT.—Strike section 109 of the Cranston-Gonzalez National Affordable Housing Act (Public Law 101–625) and insert in lieu thereof the following: "The Secretary of Housing and Urban Development shall, not later than one year after the enactment of the National Energy Security Act of 1991, adopt the energy conservation performance standards for new buildings as promulgated by the Secretary of Energy pursuant to section 304 of the Energy Conservation and Production Act (Public Law 94–385), as amended, for new construction of public and assisted housing and single-family and multifamily residential housing (other than manufactured homes) subject to mortgages under the National Housing Act.".

SEC. 3002. RESIDENTIAL ENERGY EFFICIENCY RATINGS.—(a) AMENDMENT TO NATIONAL ENERGY CONSERVATION POLICY ACT.—Title II of the National Energy Conservation Policy Act (Public Law 95–619) is hereby amended by adding a new part 6 as follows:

"PART 6—RESIDENTIAL ENERGY EFFICIENCY RATINGS

"SEC. 271.—RATINGS.—(a) Within twelve months after the date of the enactment of the National Energy Security Act of 1991, the Secretary, in consultation with the Secretary of Housing and Urban Development, shall, by rule, promulgate guidelines for procedures to be implemented by State governments that would enable the assignment of an energy efficiency rating to residential buildings.

"(b) The guidelines under subsection (a) shall—

"(1) provide for a numerical rating of the efficiency with which any residential building may be supplied with heating and cooling energy on an annual basis, and evaluate the practicality of including major energy consuming appliances in such rating;

"(2) provide that all residential buildings can receive a rating at the time of sale;

"(3) ensure that the rating is prominently communicated to potential buyers and renters;

"(4) ensure that the rating system is designed to facilitate its use by lenders and the secondary mortgage markets to promote energy efficiency; and

"(5) ensure that the rating system is consistent with and supports the uniform plan for mortgage financing incentives required under section 946 of the Cranston-Gonzales National Affordable Housing Act (Public Law 101-625).

"SEC. 272.—TECHNICAL ASSISTANCE.—Within twelve months after the date of enactment of the National Energy Security Act of 1991, the Secretary shall establish a program to provide technical assistance for State and local organizations adopting residential energy efficiency rating systems or building codes.".

(b) CONFORMING AMENDMENT.—The National Energy Conservation Policy Act is further amended by adding in the table of contents at the end of title II, the following items:

"PART 6—RESIDENTIAL ENERGY EFFICIENCY RATINGS

"Sec. 271. Ratings.
"Sec. 272. Technical Assistance.".

SEC. 3003. IMPROVING EFFICIENCY IN ENERGY-INTENSIVE INDUSTRIES.—(a) SECRETARIAL ACTION.—The Secretary, acting in accordance with authority contained in the Federal Nonnuclear Energy Research and Development Policy Act of 1974 (42 U.S.C. 5901–5920) and other applicable laws, shall—

(1) pursue a research and development program intended to improve energy efficiency and productivity in energy intensive industries and industrial processes; and

(2) undertake joint ventures to encourage the commercialization of technologies developed under paragraph (1).

(b) JOINT VENTURES.—(1) The Secretary shall—

(A) conduct a competitive solicitation for proposals from specialized private firms and investors for such joint ventures under subsection (a)(2); and

(B) provide financial assistance to at least five such joint ventures.

(2) The purpose of the joint ventures shall be to design, test and demonstrate changes to industrial processes that will result in improved energy efficiency and productivity. The joint ventures may also demonstrate other improvements of benefit to such industries so long as demonstration of energy

efficiency improvements is the principal objective of the joint venture.

(3) In evaluating proposals for financial assistance and joint ventures under this section, the Secretary shall consider—

(A) whether the research and development activities conducted under this section improve the quality and energy efficiency of industries or industrial processes;

(B) the regional distribution of the energy intensive industries and industrial processes; and

(C) whether the proposed joint-venture project would be located in the region which has the energy-intensive industry and industrial processes that would benefit from the project.

(c) Authorization.—There is authorized to be appropriated to the Secretary $5,000,000 for fiscal year 1992, $15,000,000 for fiscal year 1993, and $25,000,000 for fiscal year 1994, to carry out the purposes of this section.

Sec. 3004. Report.—(a) Report.—The Secretary, in consultation with the Council of Economic Advisors, shall submit to the Congress within one year after the date of the enactment of this Act, and every three years thereafter through the year 2004, a report setting forth energy efficiency policy options that would both decrease domestic oil consumption and overall domestic energy consumption by 1, 2, 3, and 4 per centum, per-year per-unit of Gross National Product, through the year 2005, below the projected consumption for 2005. The Secretary shall evaluate, describe and rank these policy options according to their cost-effectiveness and their feasibility of implementation.

(b) REPEAL.—Title III of the Energy Security Act (42 U.S.C. 7361, et. seq) is hereby repealed.

SEC. 3005. VOLUNTARY GUIDELINES FOR INDUSTRIAL PLANTS—(a) VOLUNTARY GUIDELINES FOR ENERGY EFFICIENCY AUDITING AND INSULATING.—Within one year after the date of the enactment of this Act, the Secretary, after consultation with utilities, major industrial energy consumers and representatives of the insulation industry, shall establish voluntary guidelines for:

(1) the conduct of energy efficiency audits of industrial facilities to identify cost-effective opportunities to increase energy efficiency; and

(2) the installation of insulation to achieve cost-effective increases in energy efficiency in industrial facilities.

(b) EDUCATION AND TECHNICAL ASSISTANCE.—The Secretary shall conduct a program of education and technical assistance to promote the use of the voluntary guidelines established under subsection (a).

(c) ANNUAL REPORT.—The Secretary shall report annually on activities conducted pursuant to this section, including an evaluation of the effectiveness of these guidelines, and the responsiveness of the industrial sector to these guidelines.

(d) AUTHORIZATION.—There is authorized to be appropriated $750,000 annually to carry out the purposes of this section.

SEC. 3006. ENERGY EFFICIENCY LABELING FOR WINDOWS AND WINDOW SYSTEMS.—(a) DEVELOPMENT OF PROGRAM.—Not later than one year after the date of enactment of this Act, the Secretary shall, in consultation with the National Fenestration Rating Council, industry representatives, and other appropriate organizations, provide financial and technical assistance to support the voluntary development of a national window rating program to establish energy efficiency ratings for windows and window systems. Such program shall set forth information and specifications that will enable purchasers of windows or window systems to make more informed purchasing decisions based upon the potential cost and energy savings of alternative window products.

(b) SECRETARIAL ACTION.—If a national window rating program, consistent with the objectives of subsection (a), is not established within two years of the date of enactment of this Act, then the Secretary shall, in consultation with the National Institute of Standards and Technology, develop, within one year, a rating program to establish energy efficiency ratings for windows and window systems under section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293).

(c) FEDERAL TRADE COMMISSION RULES.—The Federal Trade Commission (hereinafter in this section, the "Commission") shall prescribe labeling rules under section 324 of the Energy Policy and Conservation Act (42 U.S.C. 6294) for the rating program established pursuant to either subsection (a) or (b) of this section, unless the Commission determines that labeling in accordance with subsections (a) or (b) of this section is not technologically or economically feasible or is not likely to assist consumers in making purchasing decisions with respect to any type of window or window system (or class thereof).

(d) COVERED PRODUCTS.—For purposes of sections 323 and 324 of the Energy Policy and Conservation Act, windows and window systems shall be considered covered products under section 322 of such Act (42 U.S.C. 6292) unless excluded by the Commission pursuant to subsection (c).

(e) AUTHORIZATION.—There is authorized to be appropriated to the Secretary $750,000 for each of the fiscal years

1992, 1993, and 1994 to carry out the purposes of this section.

SEC. 3007. ENERGY EFFICIENCY INFORMATION.—(a) DATA ON ENERGY EFFICIENCY.—Pursuant to Section 52(a) of the Federal Energy Administration Act of 1974, (Public Law 93–275) and after consultation with State and Federal energy officials, representatives of energy using classes and sectors, and representatives of energy policy public-interest or research organizations, the Administrator of the Energy Information Administration shall expand the scope and frequency of the data it collects and reports on energy use in the United States with the objective of significantly improving the ability to evaluate the effectiveness of the Nation's energy efficiency policies and programs. The Administrator shall take into account reporting burdens and the protection of proprietary information as required by law. In expanding the collection of such data to meet this objective, the Administrator shall consider—

(1) expanding data collection to include energy intensive sectors not presently covered in Energy Information Administration surveys;

(2) increasing the frequency with which the Energy Information Administration conducts end-use energy surveys among households, commercial buildings, and manufacturing;

(3) expanding the survey instruments to include questions regarding participation in government and utility conservation programs, the energy efficiency of existing stocks of equipment and structures, and recent changes in the technical efficiency and operating practices that affect energy use;

(4) expanding the time period for which fuel-use data is collected from individual survey respondents;

(5) expanding the sample sizes for fuel-use surveys in order to improve the accuracy of subgroups of energy users; and

(6) expanding the scope and frequency of data collection on the energy efficiency and load-management programs operated by electric and gas utilities.

(b) ANNUAL REPORT.—The Administrator shall report annually to Congress on the energy efficiency in classes and sectors of the economy and on any data resulting from this section.

SEC. 3008. ENERGY EFFICIENCY LABELING FOR LAMPS AND LUMINAIRES.—(a) DEVELOPMENT OF PROGRAM.—Not later than one year after the date of enactment of this Act, and in consultation with the National Electric Manufacturers Association, industry representatives, and other appropriate organizations, the Secretary shall provide financial and technical assistance to support the voluntary development of a national energy efficiency rating program for lamps and luminaries. Such program shall set forth information and specifications that will enable purchasers of lamps and luminaries to make informed decisions among the energy efficiency and cost of alternative lamps and luminaries.

(b) SECRETARIAL ACTION.—If a national energy efficiency rating and labeling program consistent with the objectives of subsection (a) is not voluntarily established within two years of the date of enactment of this Act, then the Secretary shall, in consultation with the National Institute of Standards and Technology, develop, within one year, a rating program for lamps and luminaries under section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293).

(c) FEDERAL TRADE COMMISSION RULES.—The Federal Trade Commission (hereinafter in this section, the "Commission") shall prescribe labeling rules under section 324 of the Energy Policy and Conservation Act (42 U.S.C. 6294) for lamps and luminaries, except to the extent that the Commission determines that labeling in accordance with subsection (b) of this section is not technologically or economically feasible or is not likely to assist consumers in making purchasing decisions with respect to any type of lamp or luminarie (or class thereof).

(d) COVERED PRODUCTS.—For purposes of sections 323 and 324 of the Energy Policy and Conservation Act, lamps and luminaries shall be considered covered products under section 322 of such Act (42 U.S.C. 6292) unless excluded by the Commission pursuant to subsection (c).

(e) Authorization.—There is authorized to be appropriated to the Secretary $750,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this section.

Sec. 3009.—Commercial and Industrial Equipment Efficiency Standards.—(a) Definitions.—Section 340(2)(B) of title III part C of the Energy Policy and Conservation Act (42 U.S.C. 6311) is hereby amended:

(1) by deleting "and" at the end of clause (xiii), replacing the period at the end of clause (xiv) with "; and", and inserting the following new clause:

" (xv) utility distribution transformers.".

(b) Technical Amendment.—Section 342(b)(1) of title III, part C of the Energy Policy and Conservation Act (42 U.S.C. 6313) is hereby amended by deleting "(other than electric motors or pumps)" and inserting in lieu thereof the following: ", other than electric motors or pumps, electric lights, and utility distribution transformers,".

(c) Study.—Section 342 of title, III part C of the Energy Policy and Conservation Act (42 U.S.C. 6313) is hereby amended:

(1) by redesignating paragraph (b) as amended, as paragraph (c) and inserting a new paragraph (b) to read as follows:

"(b) Not later than eighteen months after the date of the enactment of the National Energy Security Act of 1991, the Secretary shall—

"(1) evaluate electric lights and utility distribution transformers to—

"(A) determine standard classifications with respect to size, function, type of energy used, method of manufacture, or other factors which may be appropriate for purposes of this part;

"(B) determine the practicability and effects of requiring all or part of the classes of electric lights and utility distribution transformers determined under subparagraph (A) to meet performance standards establishing minimum levels of energy efficiency; and

"(C) determine the practicability and cost-effectiveness and potential energy savings of replacing existing utility distribution transformers.

"(2) submit a report to the Congress on the results of such evaluation, together with such recommendations for legislation as he considers appropriate.".

(d) REEVALUATION OF ELECTRIC MOTORS AND PUMPS.—Pursuant to section 342 of title III part C of the Energy Policy and Conservation Act (42 U.S.C. 6313), the Secretary shall—

(1) conduct a reevaluation of electric motors and pumps to determine the practicability and effects of requiring all or part of the classes of electric motors and pumps determined under subparagraph (A) of section 342(a)(1) of the Energy Policy and Conservation Act to meet performance standards establishing minimum levels of energy efficiency; and

(2) submit a report to Congress on the results of such evaluation, together with such recommendations for legislation as he considers appropriate. The report under this subsection may include the report pursuant to section 342(b)(2) of the Energy Policy and Conservation Act.

Subtitle B—Federal Energy Management

SEC. 3101. FEDERAL ENERGY MANAGEMENT AMENDMENTS.—Part 3 of title V of the National Energy Conservation Policy Act (NECPA) (42 U.S.C. 8251 et seq.), as amended, is further amended as follows:

(a) In section 543:

(1) strike subsection (a) and insert the following new text in lieu thereof:

"(a) ENERGY MANAGEMENT REQUIREMENT FOR FEDERAL BUILDINGS.—(1) Not later than January 1, 2000, each Federal agency shall, to the maximum extent practicable, install in Federal buildings under the control of such agency in the United States, all energy conservation measures with payback periods of less than ten years as calculated using the methods and procedures developed pursuant to section 544. Within two years after the date of enactment of the National Energy Security Act of 1991, each agency shall submit to the Secretary a list of projects meeting the ten-year payback criterion, the energy that each project will save and total energy and cost savings involved.

"(2) An agency may exclude from the requirements of paragraph (1) any Federal building or collection of Federal buildings, and the associated energy consumption and gross square footage, if the head of such agency finds that compliance with the requirements of paragraph (1) would be impracticable. A finding of impracticability shall be based on the energy intensiveness of activities carried out in such Federal buildings or collection of Federal buildings, the type and amount of energy consumed, the technical feasibility of making the desired changes, or the unique character of many facilities operated by the Departments of Defense and Energy. Each agency shall identify and list in each report made under section 548, the Federal buildings designated by it for such exclusion. The Secretary shall review such findings for consistency with the impracticability standards set forth herein, and may within ninety days after receipt of the findings, reverse a finding of impracticability, in which case the agency shall comply with the requirements of paragraph (1). This section shall not apply to an agency's facilities that generate or transmit electric energy, nor to the uranium enrichment facilities operated by the Department of Energy.";

(2) In subsection (b):

(A) after the words "subsection (a)," insert the following: "The Secretary of Energy shall consult with the Secretary of Defense and the Administrator of the General Services Administration in developing guidelines for the implementation of this part, and";

(B) strike the phrase "Federal Energy Management Improvement Act of 1988," in paragraph (1) and insert in lieu thereof "National Energy Security Act of 1991, and submit to the Secretary of Energy";

(C) after the words "high priority projects;" insert the following: "and such plan shall include steps to take maximum advantage of contracts authorized under title VIII of this Act (42 U.S.C. 8287 et seq.), financial incentives, and other services provided by utilities for efficiency investment and other forms of financing to reduce the direct costs to the government;";

(D) at the end of paragraph (2), strike the semicolon and insert the following: ", and update such surveys periodically, but not less than every three years;";

(E) replace paragraph (3) with the following new paragraph:

"(3) using such surveys, determine the cost and payback period of energy conservation measures likely to achieve the goals of this section;"; and

(F) insert a new paragraph (4) as follows, and renumber paragraph (4) as "(5)":

"(4) install those energy conservation measures that will attain the requirements of this section in a cost-effective manner as defined in section 544, and".

(b) In section 544:

(1) strike "National Bureau of Standards," in subsection (a) and insert in lieu thereof "National Institute of Standards and Technology,"; and

(2) strike all after the word "each", in paragraph (b)(2) and insert in lieu thereof: "agency shall, after January 1, 1994, fully consider the energy efficiency of all potential building space at the time of renewing or

entering into a new lease. Further, all Government leased space constructed after January 1, 1994, shall meet model Federal energy conservation performance standards for new commercial buildings promulgated pursuant to section 304 of the Energy Conservation and Production Act (Public Law 94-385).".

(c) In section 545, add after the word "measures" the following: "as needed to meet the requirements of section 543.".

(d) In section 546, strike subsection (b) and insert in lieu thereof the following:

"(b) IMPLEMENTATION.—To facilitate the financing of energy conservation measures, each Federal agency shall promote the use of contracts authorized by title VIII of this Act (42 U.S.C. 8287 et seq.). The Secretary, in consultation with the Secretary of Defense and the Administrator of the General Services Administration, within six months after the date of the enactment of the National Energy Security Act of 1991, shall develop appropriate procedures and methods for use by Federal agencies to select energy service contractors that will achieve the intent of this section in a cost-effective manner. Notwithstanding any other procurement laws and regulations, such procedures and methods shall apply to the selection of energy service contractors by each Federal agency.".

(e) In section 548:

(1) strike the word "Each" in subsection (a) and insert in lieu thereof the following: "In addition to the plan required to be submitted to the Secretary pursuant to section 543(b)(1), each";

(2) insert the phrase "by April 2 of each year," after the word "annually" in subsection (b); and

(3) insert the words "by each agency", after the words "under this part" in subsection (b)(1).

(f) At the end of part 3, add the following new sections:

"SEC. 552. UTILITY INCENTIVE PROGRAMS.—Federal agencies are permitted and encouraged to participate in programs conducted by any gas or electric utility for the management of energy demand or for energy conservation in federally owned or leased facilities. Federal agencies may accept incentives designed to encourage energy demand management or energy conservation, generally available from any such utility to its customers, to adopt technologies and practices that are determined to be cost-effective.

"SEC. 553. SHARED ENERGY SAVINGS.—(a) The Secretary shall develop a simplified method of contracting for shared energy savings contract services that will accelerate the use of these contracts and will reduce the administrative effort and cost on the part of the government as well as the private customers.

"(b)(1) In carrying out subsection (a), the Secretary may:

"(A) request statements of qualifications, including financial and performance information, from firms engaged in providing shared energy savings contracting;

"(B) designate from the statements received, with an update at least annually, those firms that are presumptively qualified to provide shared energy savings services;

"(C) select at least three firms from the qualifying list to conduct discussions concerning a particular proposed project, including requesting a technical and price proposal from such selected firms for such project; and

"(D) select from such firms the most qualified firm to provide shared energy savings services pursuant to a contractual arrangement that the Secretary determines is fair and reasonable, taking into account the estimated value of the services to be rendered and the scope and nature of the project.

"(2) In carrying out subsection (a), the Secretary may also provide for the direct negotiation by departments, agencies, and instrumentalities, of contracts with shared energy savings contractors that have been selected competitively and approved by any gas or electric utility serving the department, agency, or instrumentality concerned.

"SEC. 554. FEDERAL PRODUCT SCHEDULE.—Not later than two years after the date of enactment of the National Energy Security Act of 1991, the Administrator of the General Services Administration, in consultation with the Secretary, shall conduct an analysis of significant energy consuming products in the Federal Supply Schedule and develop and implement a method to identify those products which offer cost-effective opportunities to reduce energy consumption and costs. The Administrator shall also issue guidelines for users of the Federal Product Schedule to encourage the purchase of identified energy efficient models.

"SEC. 555. PURCHASE OF FEDERAL VEHICLES.—The Administrator of the General Services Administration, through the Automotive Commodity Center, in evaluating and accepting bids for the purchase of passenger vehicles and light trucks to meet specified requirements, shall consider the fuel efficiency of the passenger vehicles and light trucks offered in the bid, and the probable fuel and cost savings to the Federal government over the expected term of Federal use of such passenger vehicles and light trucks.

"SEC. 556. FEDERAL ENERGY EFFICIENCY PROJECTS FUNDING.—(a) IN GENERAL.—Not later than one year after the date of enactment of the National Energy Security Act of

1991, the Secretary shall establish guidelines for the transfer of up to $1 million per project to encourage any Federal agency to undertake energy efficiency projects in Federally owned facilities.

"(b) PROJECT SELECTION.—The Secretary shall establish procedures for the receipt of proposals under this section. The Secretary shall consider the following factors in determining whether to provide funding under subsection (a):

"(1) the cost effectiveness of the project;

"(2) the proportion of energy and cost savings anticipated to the Federal Government;

"(3) the amount of funding committed to the project by the agency requesting financial assistance;

"(4) the extent that a proposal leverages financing from other non-Federal sources; and

"(5) any other factor which the Secretary determines will result in the greatest amount of energy and cost savings to the Federal Government.

"(c) REPORTS.—The Secretary shall report annually to Congress, in the supporting documents accompanying the President's budget, on the activities under this section. The report shall include the projects funded and the projected energy and cost savings from installed measures.

"(d) AUTHORIZATION.—For purposes of this subsection, there is authorized to be appropriated, and to remain available until expended, not more than $50 million.".

SEC. 3102. PLAN REGARDING DEMONSTRATION OF NEW TECHNOLOGY.—(a) PLAN.—Within one year after the date of the enactment of this Act, the Secretary shall submit a plan to Congress for the demonstration in Federally owned facilities of energy efficiency and renewable energy technologies. The technologies shall be those technologies, as determined by the Secretary, that are ready for commercial demonstration. The Plan shall include:

(1) a listing of those technologies with specific candidate sites for the demonstration;

(2) the energy, environmental, cost savings or other expected benefits;

(3) a timetable for implementation; and

(4) a process for evaluation of the performance of the technologies.

(b) UPDATE.—The plan shall be updated every two years.

Subtitle C—Utilities

SEC. 3201. ENCOURAGEMENT OF INVESTMENTS IN CONSERVATION AND ENERGY EFFICIENCY RESOURCES AND STUDY OF CERTAIN STATE RATEMAKING POLICIES.—(a) AMENDMENT TO THE PUBLIC UTILITY REGULA-

TORY POLICIES ACT.—The Public Utility Regulatory Policies Act of 1978 (92 Stat. 3117), as amended, is further amended by inserting the following new paragraph at the end of section 111:

"(7) ENCOURAGEMENT OF INVESTMENTS IN CONSERVATION AND ENERGY EFFICIENCY RESOURCES.—

"(A) The rates allowed to be charged by a State regulated electric utility shall be such that the utility's investment in and expenditures for energy conservation, energy efficiency resources and other demand side management measures are as profitable as its investments in and expenditures for the construction of new generating facilities.

"(B) For purposes of implementing the provisions of this paragraph, any reference contained in this title to the date of enactment of the Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date of enactment of the National Energy Security Act of 1991.".

(b) REPORT.—Not later than two years after the date of the enactment of this Act, the Secretary shall submit a report to the President and to the Congress containing—

(1) a survey of all State laws, regulations, practices, and policies under which State regulatory authorities require or permit rates charged by an electric utility to reflect least-cost planning;

(2) an evaluation by the Secretary of whether, and to what extent, least-cost planning is likely to result in:

(A) higher or lower electricity costs to an electric utility's ultimate consumers or to classes or groups of such consumers;

(B) enhanced or reduced reliability of electric service; and

(C) increased or decreased dependence on particular energy resources; and

(3) an evaluation by the Secretary of whether, and to what extent, ratemaking methodologies implementing least-cost planning adequately take into account the impact of such measures on electric utilities' costs, operations, and rate of return on investment.

(c) DEFINITION.—For purposes of subsection (b), the term "least-cost planning" means any standard, regulation, practice, or policy by which a State regulatory authority considers, or requires a State regulated electric utility to consider or implement, a plan for action (including, but not limited to, the construction of or purchase of electric energy from new generation facilities and investment in or expenditures for conservation, energy efficiency resources, or other demand-side management measures) to be taken by a State regulated electric utility for purposes of providing adequate and reliable service to its electric customers with the incurrence of lowest costs by such utility and its customers.

SEC. 3202. CONSERVATION GRANTS TO STATE REGULATORY AUTHORITIES.—(a) CONSERVATION GRANTS.—The Secretary is authorized in accordance with the provisions of this section to provide grants to State regulatory authorities in an amount not to exceed $500,000 per authority, for purposes of encouraging the consideration of conservation, energy efficiency resources and other demand side management measures as a means of meeting electric supply needs.

(b) PLAN.—A State regulatory authority wishing to receive a grant under this section shall submit a plan to the Secretary that specifies the actions such authority proposes to take that would achieve the purposes of this section.

(c) SECRETARIAL ACTION.—In determining whether, and in what amount, to provide a grant to a State regulatory authority under this section the Secretary shall consider, in addition to other appropriate factors, the actions proposed by the State regulatory authority:

(1) to consider implementation of the ratemaking standard established in section 111(d)(7) of the Public Utility Regulatory Policies Act of 1978; and

(2) to achieve the purposes of this section.

(d) RECORDKEEPING.—Each State regulatory authority that receives a grant under this section shall keep such records as the Secretary shall require.

(e) RULES.—The Secretary may prescribe such rules as may be necessary or appropriate for carrying out the provisions of this section.

(f) DEFINITIONS.—For purposes of this section, the term "State regulatory authority" shall have the same meaning as defined in section 3 of the Public Utility Regulatory Policies Act of 1978.

(g) AUTHORIZATION.—There is authorized to be appropriated $5,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purpose of this section.

Subtitle D—Used Oil Energy Production

SEC. 3301. PURPOSE.—The purpose of this subtitle is to promote the refining, re-refining and reprocessing of used lubricating oil into fuels and other petroleum products.

SEC. 3302. REQUIREMENTS FOR ENERGY PRODUCTION FROM USED OIL.—Section 383 of the Energy Policy and Conservation Act (42 U.S.C. 6363) is amended—

(1) in subsection (c) by—

(A) striking "As soon as practicable after the date of enactment of this Act" and inserting "Not less than fifteen months after the date of enactment of the National Energy Security Act of 1991"; and

(B) striking "National Bureau of Standards" each place it appears and inserting "National Institute of Standards and Technology"; and

(2) by adding at the end thereof the following new subsection:

"(g) MARKET INCENTIVES FOR THE REUSE OF USED OIL.—

"(1) REQUIREMENTS.—(A) Beginning not later than eighteen months after the date of the enactment of the National Energy Security Act of 1991, a producer or importer of one hundred thousand gallons or more per year of lubricating oil shall each year either refine, re-refine, or reprocess into petroleum products, including fuels, using a method described in subparagraph (B), an amount of used oil equal to at least that amount of oil determined by—

"(i) multiplying the lubricating oil produced or imported that year by such person, by "(ii) the percentage established by the Secretary under paragraph (2).

"(B) A producer or importer of lubricating oil may comply with this paragraph by—

"(i) refining, re-refining, or reprocessing used oil for purposes of producing petroleum products, including fuels; or

"(ii) purchasing credits under the credit system established pursuant to paragraph (3).

"(2) ESTABLISHMENT OF REUSE PERCENTAGE.—The Secretary shall establish, on an annual basis, a percentage for use under paragraph (1). The percentage applicable during the first year that the requirement established by paragraph (1) is in effect, shall be a percentage that is equal to the reuse rate for lubricating oil that exists on the date of the enactment of the National Energy Security Act of 1991. Such rate shall be determined by using data for the most recent year for which data are available. Through the year 2000, the percentage shall be an additional 2 percentage points higher than the actual percentage for the previous year as determined by the Secretary.

"(3) REGULATIONS.—"(A) IN GENERAL.—Not later than eighteen months after the date of the enactment of the National Energy Security Act of 1991, the

Secretary shall promulgate regulations to implement these requirements. These regulations shall cover:

"(i) producers or importers of lubricating oil;

"(ii) generators or collectors of used oil;

"(iii) a system, including permits, by which refiners, re-refiners and reprocessors of used oil may create credits which may be purchased by producers and importers of lubricating oil for the purpose of complying with subparagraph (1)(B);

"(iv) enforcement;

"(v) record-keeping;

"(vi) any other requirement which the Secretary considers necessary for administering the program set forth by this subsection; and

"(vii) prohibitions on the mixing of used oil with hazardous wastes or other physical or chemical impurities not associated with its use as a lubricating oil, and the creation of credits from such mixed used oil.

"(B) Exemptions.—

"(i) This subsection shall not apply to a facility:

"(I) that is classified as an S.I.C. number 2911 facility under the Office of Management and Budget Standard Classification Manual and that refines used oil into fuel or other petroleum products, the amount of which is equal to no more than the amount of used oil that the owner of the facility is required to refine or otherwise reuse under paragraph (1)(A).

"(II) that is classified as an S.I.C. number 2899, or S.I.C. number 2992 facility under the Office of Management and Budget Standard Classification Manual and that compounds or blends lubricating base oil into finished lubricant products as its principal activity, provided that such facility has a contract to reprocess a customer's used lubricant, and does not take title to such lubricant, and such reprocessed lubricant product is returned to the customer.

"(ii) This subsection shall not apply to used oil that is generated on-site for on-site energy production activities, including storage, use, and transportation, carried out at a facility that is classified as an S.I.C. number 4911 facility under the Office of Management and Budget Standard Classification Manual.

"(iii) The Secretary shall promulgate regulations establishing requirements for exempt refineries that refine used oil. The regulations shall cover recordkeeping, testing, and such other matters as the Secretary determines are necessary and appropriate for refining used oil at exempt refineries.

"(4) DEFINITIONS.—For purposes of this subsection, the term—

"(A) 'credit' means a legal record of used oil refined, re-refined or reprocessed in accordance with this subsection for purposes of complying with paragraph (1);

"(B) 'producer' with respect to lubricating oil means any person who produces a lubricant base stock from crude oil. Such production does not include the re-refining of used oil;

"(C) 'importer' with respect to lubricating oil means any person who imports a lubricant base stock or lubricating oil, except for lubricating oil contained in transportation vehicles or other machinery;

"(D) 'lubricant base stock' means oil from which lubricating oil is made after introduction of additives;

"(E) 'generator' and 'collector' mean any person who collects, stores, accumulates, or otherwise generates used oil. Such terms do not include an individual who generates used oil by removing such oil from the engine of a light duty motor vehicle or household appliance owned by that individual;

"(F) 're-refiner' and 'reprocesser' mean any person who produces lubricating oils, fuels, or other petroleum products through the processing of used oil; and

"(G) 'refiner' means any owner or operator of a facility that is classified as an S.I.C. 2911 facility under the Office of Management and Budget Standard Classification Manual.

"(5) AUTHORIZATIONS.—(A) There is authorized to be appropriated to the Secretary of Energy $2,000,000 to carry out this subsection.

"(B) There is authorized to be appropriated to the Secretary of Commerce for use by the National Institute of Standards and Technology $3,000,000 to carry out its responsibilities under this section.

"(6) REPORT.—One year after the date of enactment of this subsection, and annually thereafter, the Secretary shall submit a report to the House of Representatives and the Committee on Energy and Natural Resources of the Senate on the implementation and operation of this subsection.".

SEC. 3303. LISTING OR IDENTIFICATION OF USED OIL.—Section 3001 of the Solid Waste Disposal Act is amended by adding at the end the following:

"(j) USED OIL.—Notwithstanding this Act or any other provision of law, the Administrator shall not list or identify used oil as a hazardous waste under this subtitle, nor shall used oil otherwise be deemed to be a hazardous waste under this subtitle.".

SEC. 3304. SUNSET PROVISION.—The provisions of this subtitle expire five years after the date of enactment of this Act.

Subtitle E—Insular Areas Energy Assistance

SEC. 3401. INSULAR AREAS ENERGY ASSISTANCE PROGRAM.—(a) FINANCIAL ASSISTANCE.—(1) The Secretary, pursuant to the Federal Nonnuclear Energy Research and Development Policy Act of 1974 (42 U.S.C. 5901-5901), may grant financial assistance to Insular area governments to carry out projects to evaluate the feasibility of, develop options for, and encourage the adoption of energy efficiency and renewable energy measures which reduce the dependency of the Insular area on imported fuels and promote development in the Insular area.

(2) Any applicant for financial assistance under this section must evidence coordination and cooperation with, and support from, the affected local energy institutions.

(3) In determining the amount of financial assistance to be provided for a proposed project, the Secretary shall consider—

(A) whether the measure will reduce the relative dependence of the Insular area on imported fuels;

(B) the ease and costs of operation and maintenance of any facilities contemplated as a part of the project;

(C) whether the project will rely on the use of conservation measures or indigenous, renewable energy resources that were identified in the 1982 Territorial Energy Assessment or are identified by the Secretary as consistent with the purpose of this section;

(D) whether the measure will contribute significantly to development or the quality of the environment in the Insular area; and

(E) any other factors which the Secretary may determine to be relevant to a particular project.

(4) The Secretary shall require at least 20 per centum of the costs of any project under this section to be provided from non-Federal sources. Such cost sharing may be in the form of

inkind services, donated equipment, or any combination thereof.

(b) DEFINITIONS.—For the purpose of this section, the term—

(1) "Insular area government" means American Samoa government, Commonwealth of the Northern Mariana Islands, Commonwealth of Puerto Rico, Federated States of Micronesia, Government of Guam, Republic of the Marshall Islands, Republic of Palau, and United States Virgin Islands; and

(2) "1982 Territorial Energy Assessment" means the assessment prepared by the Department of Energy pursuant to the Omnibus Territorial Act. (Public Law 96–597, 94 Stat. 3480; as amended by Public Law 99–213, 97 Stat. 1460).

(c) AUTHORIZATION.—There is hereby authorized to be appropriated for each fiscal year $500,000 to carry out the purposes of this section.

TITLE IV—RENEWABLE ENERGY

Subtitle A—CORECT

SEC. 4001. DUTIES OF CORECT.—Section 256 of title II, part B, of the Energy Policy and Conservation Act is amended by striking subsection (d) and inserting the following in lieu thereof:

"(d)(1) DUTIES.—There shall be established an interagency working group (hereafter in this subsection referred to as the Committee on Renewable Energy Commerce and Trade (CORECT)) which, in consultation with the representative industry groups and relevant agency heads, shall make recommendations to coordinate the actions and programs of the Federal Government to promote the export of United States renewable energy and energy efficiency products and technologies. The Secretary of Energy shall be the Chairman of such group. The heads of appropriate agencies may detail such personnel and may furnish such services to such working group, with or without reimbursement, as may be necessary to carry out its functions.

"(2) ADDITIONAL DUTIES.—CORECT shall promote the development and application in lesser-developed countries of renewable energy and energy efficiency resource technologies that—

"(A) promote more efficient use of fossil fuels;

"(B) reduce dependence on the importation of fossil fuels by encouraging the use of sustainable biomass, wind power, hydropower, solar, geothermal and other renewable energy and energy efficiency resource technologies;

"(C) foster rural and urban energy development and energy self-sufficiency through the use of reliable and economical renewable energy and energy efficiency resource technologies;

"(D) explore mechanisms for assisting in the domestic manufacture, particularly by small business manufacturers, of energy efficiency and renewable energy resource technologies, for export; and

"(E) increase staffing to support the new authority and responsibilities described in this section.

"(3) TRAINING AND ASSISTANCE.—In furthering the purposes of this section, CORECT shall—

"(A) provide aggressive in-country technical training for local users and international development personnel;

"(B) provide financial assistance to support nonprofit institutions designed solely and specifically to support the efforts of domestic renewable energy and energy conservation companies to market their products, and to develop environmentally responsible projects in developing nations;

"(C) establish feasibility and loan guarantee programs to facilitate access to capital and credit; and

"(D) support, through financial incentives, private sector efforts to commercialize and export renewable energy and energy efficiency resource technologies.

"(4) OUTREACH.—CORECT may establish renewable energy industry outreach offices in the Pacific Rim and in the Caribbean Basin for the purpose of providing information concerning renewable energy and energy efficiency technologies and industries of the United States to governments, industries, and others outside of the continental United States.".

SEC. 4002. INFORMATION AND TECHNICAL PROGRAM.—Section 256(c)(2)(D) title II part B of the Energy Policy and Conservation Act is amended by striking clause (ii) and inserting in lieu thereof the following new clause:

"(ii) information on the specific energy technology needs of lesser-developed countries, the technical and economic competitiveness of various renewable energy and energy efficiency resource technologies, and the status of ongoing technology assistance programs shall be provided. Information from this program shall be made available to industry, Federal and multilateral lending agencies, nongovernmental organizations, host-country and donor-agency officials, and such others as the Secretary deems necessary.".

SEC. 4003. COMPREHENSIVE ENERGY TECHNOLOGY EVALUATION.— Section 256 of title II, part B, of the Energy Policy and Conservation Act is amended by adding at the end new subsections (e) and (f) as follows:

"(e)(1) Not later than June 1, 1991, and biennially thereafter, the Secretary shall prepare and submit to Congress a report evaluating the range of energy efficiency and renewable energy technologies available to meet the energy needs of developing countries. This report also shall provide information on the specific energy needs of lesser-developed countries, an inventory of United States technologies and services to meet those needs, and an update on the status of ongoing bilateral and multilateral technology assistance and renewable energy resource programs.

"(2) The report also should include an evaluation of current programs, their priority in meeting program objectives, and recommendations for future programs that—

"(A) develop and promote sustainable use of indigenous renewable energy resources in lesser-developed countries;

"(B) given the credit and capital restrictions in lesser-developed countries, focus on technologies that are both appropriate and economically viable;

"(C) meet the needs of lesser-developed countries for energy rather than creating new needs, in order to ensure immediate income-generating use of the power generated;

"(D) work with local individuals to assure that programs and projects meet specific national and local needs;

"(E) use indigenous materials and associated hardware, wherever possible, in order to reduce costs and ensure project duplication;

"(F) provide examples of cost-effective systems and applications for in-country non-governmental organizations and project technical personnel;

"(G) provide mechanisms for assisting United States manufacturers, particularly smaller manufacturers, of energy-efficiency and renewable energy technologies, in exporting their goods and services;

"(H) expand technical and administrative training programs, as well as distribution of multilingual technical training manuals and related materials; and

"(I) examine the potential for using economic incentives to promote technology transfer, such as shared savings contracts, loan guarantees, and tax incentives, to lesser developed countries.

"(f) AUTHORIZATIONS.—(1) There is authorized to be appropriated for purposes of carrying out the programs under sections (d) and (e) $10,000,000 for fiscal year 1992, including $2,000,000 to carry out the purposes of subparagrapl (d)(2), and such sums as may be necessary for fiscal yea

1993 and 1994 to carry out the purposes of this subtitle except for subparagraph (d)(4).

"(2) There is authorized to be appropriated for the purposes of subparagraph 256(d)(4), in addition to the amount specified in the previous sentence, $2,750,000 for fiscal year 1992, and such sums as may be necessary for fiscal years 1993 and 1994.".

Subtitle B—Renewable Energy Initiatives

SEC. 4101. JOINT VENTURES FOR RENEWABLE ENERGY DEVELOPMENT FOR OIL DISPLACEMENT AND TECHNOLOGY EXPORT TRAINING.—(a) Section 6 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (Public Law 101–218) is amended by adding new subsections (f) and (g) as follows:

"(f) ADDITIONAL JOINT VENTURES FOR RENEWABLE ENERGY DEVELOPMENT FOR OIL DISPLACEMENT.—

"(1) OIL DISPLACEMENT BY BIOFUELS ENERGY SYSTEMS.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the commercialization of biofuels energy systems technology in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test and demonstrate critical enabling technologies for the development of biofuels energy systems for commercial application in uses that have substantial prospects for displacing the consumption of oil.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993 and 1994 to carry out the purposes of this paragraph.

"(2) OIL DISPLACEMENT BY GEOTHERMAL ENERGY.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the commercialization of geothermal energy conversion technology in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test and demonstrate critical enabling technologies for the production of geothermal energy for commercial application in uses that have substantial prospects for displacing the consumption of oil.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.

"(3) OIL DISPLACEMENT BY SOLAR WATER HEATING.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the commercialization of solar water heating technology in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test and demonstrate critical enabling technologies for solar water heating for commercial application in institutional water heating and process heat uses that have substantial prospects for displacing the consumption of oil.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.

"(4) DIESEL FUEL OIL DISPLACEMENT BY PHOTOVOLTAIC AND WIND ENERGY SYSTEMS.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the commercialization of photovoltaic and wind energy systems in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test and demonstrate critical enabling technologies for photovoltaic and wind energy systems for commercial application in electric power generation uses that have substantial prospects for displacing the consumption of diesel fuel oil.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.

"(5) DIESEL FUEL OIL DISPLACEMENT BY DIRECT COMBUSTION OR GASIFICATION OF BIOMASS.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the commercialization of technologies for the direct combustion or gasification of biomass in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test and demonstrate critical enabling technologies for direct combustion or gasification of biomass, including waste wood, for industrial process heat and electric power generation for commercial application in uses that have substantial prospects for displacing the consumption of diesel fuel oil.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.

"(6) OIL DISPLACEMENT BY FUEL CELLS TECHNOLOGY.—

"(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the demonstration of fuel cells technology in accordance with the provisions of this paragraph.

"(B) The purpose of joint ventures supported under this paragraph shall be to design, test, and demonstrate critical enabling technologies for the production of electric energy from fuel cells in order to accelerate commercial application of fuel cells.

"(C) There is authorized to be appropriated to the Secretary not to exceed $3,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.

"(g) RENEWABLE ENERGY AND ENERGY EFFICIENCY TECHNOLOGY EXPORT TRAINING.—(1) The Secretary shall solicit proposals for and provide financial assistance to at least two joint ventures for the training of individuals from developing countries at a location or locations in the United States, at least one of which shall be in the operation and maintenance of renewable energy equipment and one of which shall be in the operation and maintenance of energy efficiency equipment, in accordance with the provisions of this paragraph.

"(2) The purpose of joint ventures supported under this paragraph shall be to train individuals, including engineers and other professionals, in the operation and maintenance of renewable energy and energy efficiency equipment manufactured in the United States, including equipment for water pumping and the production of electric power in remote areas, in order to enhance the prospects that such equipment can be used to displace the use of diesel fuel oil in developing countries.

"(3) There is authorized to be appropriated to the Secretary not to exceed $6,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this paragraph.".

(b) CONFORMING AMENDMENTS.—(1) The first sentence of paragraph (b)(1) of such section is amended to replace the phrase "subsection (c)" with the phrase "subsections (c), (f) and (g)".

(2) Paragraph (b)(4) of such section is amended to read as follows—

"(4) DRAFT SOLICITATIONS AND PUBLIC COMMENT.—The Secretary shall issue a draft solicitation for joint ventures under subsection (c) by September 30, 1990 and a draft solicitation for joint ventures under subsections (f) and (g) by September 30, 1991. After any such draft solicitation has been issued, the Secretary shall provide for a period of public comment before the issuance of a final solicitation.".

(3) Subsection (d) of such section is amended to replace the phrase "subsection (c)" everywhere it appears by "subsections (c) or (f)".

SEC. 4102. REPORT ON WASTE MINIMIZATION TECHNOLOGIES IN INDUSTRY. (a) REPORT.—Within one year after the date of enactment of this Act, the Secretary shall provide to the Committee on Energy and Natural Resources of the United States Senate and to the United States House of Representatives a report evaluating opportunities to minimize waste outputs from production processes in industries in the United States.

(b) CONTENTS.—The report required by this section shall include—

(1) an assessment of the technologies available to increase productivity and simultaneously reduce the consumption of energy and material resources and the production of wastes;

(2) an assessment of the current use of such technologies by industry in the United States;

(3) the status of any such technologies currently being developed, together with projected time-frames for their commercial availability;

(4) the energy savings resulting from the use of such technologies;

(5) the environmental benefits of such technologies;

(6) the costs of such technologies;

(7) an evaluation of any existing federal or state regulatory disincentives for the employment of such technologies; and

(8) an evaluation of any other barriers to the use of such technologies.

(c) CONSULTATION.—In preparing the report required by this section, the Secretary shall consult with the Administrator of the Environmental Protection Agency, any other Federal, State, or local official the Secretary deems necessary, representatives of appropriate industries, members of organizations formed to further the goals of environmental protection or energy efficiency, and other appropriate interested members of the public, as determined by the Secretary.

Subtitle C—Hydropower

SEC. 4201. SECTION 401 CERTIFICATION.—(a) STATE CERTIFICATION.—Any State or interstate water pollution control agency that receives a request for certification under section 401 of the Clean Water Act (33 U.S.C. 1341) in connection with an application for a license under part I of the Federal Power Act, as amended, (16 U.S.C. 791a et seq.) is prohibited from including as a condition of certification any requirement not needed to ensure that any discharge resulting from the issuance of such license, and the construction or operation of a hydroelectric project thereunder, will comply with the applicable provisions of 33 U.S.C. sections 1311, 1312, 1313, 1316 and 1317.

(b) VIOLATIONS.—Any requirement included in a certification which is determined by the Federal Energy Regulatory Commission to be in violation of subsection (a) shall not be effective.

SEC. 4202. STREAMLINING OF FEDERAL POWER ACT REGULATION.— The Federal Power Act, as amended, (16 U.S.C. 791a et seq.) is further amended by—

(a) striking in section 4(e) the following: ", and shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservation";

(b) inserting the following new subparagraph at the end of section 10(a)(2):

"(D) In the case of a project located within a reservation, the recommendations of the Secretary under whose supervision such reservation falls concerning the adequate protection and utilization of such reservation.";

(c) striking "and (B)" in section 10(a)(3) and inserting ", (B) and (D)" in lieu thereof;

(d) striking subsection (i) in section 10 and relettering the subsections accordingly;

(e) striking in section 18 the following: ", and such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate";

(f) adding at the end of section 23 the following:

"(c) The provisions of this Act shall not apply to any project having a power production capacity of 1500 kilowatts or less.".

SEC. 4203. IMPROVEMENT AT EXISTING FEDERAL FACILITIES.—(a) The Secretary, in consultation with the Secretary of the Interior and the Secretary of the Army, shall perform studies of cost effective opportunities to increase hydropower production at existing federally-owned or operated water regulation, storage and conveyance facilities. Such studies shall be completed within two years of the enactment of this Act and transmitted to the Committee on Energy and Natural Resources in the United States Senate and to the United States House of Representatives. An individual study shall be prepared for each of the Nation's principal river basins. Each such study shall identify and describe with specificity the following matters:

(1) opportunities to improve the efficiency of hydroelectric generation at such facilities through, but not limited to, mechanical, structural or operational changes;

(2) opportunities to improve the efficiency of the use of water supplied or regulated by Federal projects where such improvement could, in the absence of legal or administrative constraints, make additional water supplies available for hydroelectric generation or reduce project energy use;

(3) opportunities to create additional generating capacity at existing facilities through, but not limited to, the construction of additional generating units, the uprating of generators and turbines, and the construction of pumped storage facilities; and

(4) preliminary assessment of the costs of such measures.

(b) There is authorized to be appropriated in each of fiscal years 1992, 1993 and 1994 such sums as are necessary to carry out the purposes of this section.

TITLE V—COAL, COAL TECHNOLOGY AND ELECTRICITY

Subtitle A—Coal and Coal Technology

SEC. 5001. COAL RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.—(a) ESTABLISHMENT.—The Secretary, in consultation with the National Coal Council and other representatives of the public as the Secretary deems necessary, shall, in accordance with the Federal Nonnuclear Energy Research and Development Policy Act of 1974 (42 U.S.C. 5901–5920), conduct a research, development, and demonstration program within the Department of Energy for advanced coal-based technologies with the goal and objective of achieving the control of sulfur oxides and oxides of nitrogen at levels of proficiency greater than currently available commercial technology. The coal technology development program shall also be designed to assure the timely development of cost-effective technologies or energy production processes or systems utilizing coal which achieve greater efficiency in the conversion of coal to useful energy when compared to currently available commercial technology for the use of coal and the control of emissions from the combustion of coal. Such program shall be designed to assure the availability for commercial use of such technologies by the year 2010.

(b) REPORT.—Within two hundred and forty days after the date of enactment of this Act the Secretary shall transmit to the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate a report which shall include—

(1) a detailed description of ongoing research and development activities regarding advanced coal-based technologies undertaken by the Department of Energy, other Federal or State government departments or agencies and, to the extent such information is publicly available, other public or private organizations in the United States and other countries;

(2) a listing and analysis of current Federal and State government regulatory and financial incentives that could further the goals of the program established by this section;

(3) recommendations, if any, regarding additional cost-sharing demonstrations conducted pursuant to the Clean Coal Program established by Public Law 98-473, that could assure that the goals of the program established by this section are achieved; and

(4) a detailed plan for conducting the research, development, and demonstration program to achieve the goals and objectives of subsection (a) of this section, which plan shall include a description of—

(i) the program elements and management structure to be utilized; and

(ii) the technical milestones to be achieved with respect to each of the advanced coal-based technologies included in the plan.

(c) ANNUAL REPORT.—Within twelve months after submittal of the report described in subsection (b) of this section, and every twelve months thereafter for a period of five years, the Secretary shall submit to the Congress a report that provides a detailed description of the status of development of the advanced coal-based technologies and the research, development, and demonstration activities undertaken to carry out the program required by this section.

(d) DEFINITION.—As used in this section, the term "advanced coal-based technologies" means, but is not limited to, the following—

(1) advanced integrated gasification combined cycle;

(2) pressurized fluidized bed combustion technology capable of achieving higher thermal conversion effi-

ciency than can be achieved through ongoing demonstration projects;

(3) direct and indirect coal-fired turbines;

(4) coal refining processes capable of efficiently producing or utilizing the energy contained in coal and also utilizing the byproducts thereof;

(5) magnetohydrodynamics;

(6) molten carbonate and solid oxide fuel cells;

(7) coal liquefaction processes; and

(8) other coal-based technologies or processes or systems that are capable of achieving thermal conversion efficiencies equal to or greater than 50 per centum.

SEC. 5002. NON-FUEL USE OF COAL.—(a) PLAN.— Not later than one hundred and twenty days after the date of the enactment of this Act, the Secretary shall submit to Congress a plan for research, development, and demonstration with respect to technologies for non-fuel use of coal, including—

(1) production of coke and other carbon products derived from coal;

(2) production of coal-derived, carbon-based chemical intermediates that are precursors of value-added chemicals and polymers;

(3) production of chemicals from coal-derived synthesis gas;

(4) coal treatment processes, including methodologies such as solvent-extraction techniques that produce low ash, low sulfur, coal-based chemical feedstocks; and

(5) waste utilization, including recovery, processing, and marketing of products derived from sulfur, carbon dioxide, nitrogen, and ash from coal.

(b) JOINT VENTURES.—As part of the plan under subsection (a), the Secretary may propose specific joint ventures to accelerate the development and commercialization of technologies for non-fuel uses of coal.

(c) PLAN CONTENTS.—The plan under subsection (a) shall address and evaluate—

(1) the known and potential products and processes for the use of coal for products in the chemical, utility, fuel, and carbon-based materials industries;

(2) the costs, benefits and economic feasibility of using coal products in the chemical and materials industries, including value-added chemicals, carbon-based products, coke, and waste derived from coal;

(3) the economics of co-production of products from coal in conjunction with production of electric power, thermal energy, and fuel;

(4) the economics of coal utilization in comparison with other feedstocks that might be used for the same purposes;

(5) the steps that can be taken by the public and private sectors to bring about commercialization of research results produced by the research program recommended; and

(6) the past development, current status, and future potential of coal products and processes associated with non-fuel use of coal.

(d) RESEARCH AND DEVELOPMENT.—The Secretary shall conduct a program of research and development under the plan under subsection (a).

(e) FUNDING.—The Secretary may provide financial assistance for a research project under the plan using funds authorized by section 5007(b) to the extent the Secretary finds that such project—

(1) furthers achievement of the goals and purposes of this Act;

(2) offers promise for commercial application; and

(3) has a reasonable prospect of support in at least 50 per centum of its direct costs from non-Federal funds.

(f) CONSULTATION.—In preparing the plan and carrying out research under this section, including evaluating the technical progress, feasibility, and most effective means for utilizing the results of research, the Secretary shall consult with the private sector.

SEC. 5003. COAL EXPORTS.—(a) PLAN.—Within one hundred and eighty days after the date of enactment of this section, the Secretary, in consultation with the Secretary of Commerce, the Secretary of State, and the United States Trade Representative, shall submit to the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate a plan for expanding the export of United States coal.

(b) PLAN CONTENTS.—Such plan shall include—

(1) identification of the location, size, and projected growth in potential foreign markets for coal produced in the United States;

(2) identification by country of the existence of barriers to United States coal exports, including foreign coal production and utilization subsidies, tax treatment, labor practices, tariffs, quotas, and other nontariff barriers;

(3) recommendations and an action plan for addressing any such barriers;

(4) an evaluation of existing United States infrastructure, and any new infrastructure requirements within the United States to support an expansion of

United States coal exports, including ports, vessels, rail lines, and any other supporting infrastructure; and

(5) identification of opportunities for blending United States coal exports with coal indigenous to the importing country to enhance energy efficiency and environmental performance.

SEC. 5004. CLEAN COAL TECHNOLOGY EXPORT COORDINATING COUNCIL.—(a) ESTABLISHMENT.—There shall be established a Clean Coal Technology Export Coordinating Council (hereinafter "Council") which shall seek to facilitate and expand the export and use of clean coal technologies. The Council shall place a priority on the export and use of clean coal technologies in lesser developed countries.

(b) MEMBERSHIP.—The Council shall consist of the Secretary, who shall serve as its chairperson, the Secretary of Commerce, the Secretary of State (including a designee from the Agency for International Development and the Trade and Development Program), the Administrator of the Environmental Protection Agency, the President and Chairman of the Export-Import Bank, and the President and Chief Executive Officer of the Overseas Private Investment Corporation.

(c) CONSULTATION.—In undertaking its responsibilities, the Council shall consult with representatives from the United States coal industry, the electric utility industry, manufacturers of equipment utilizing clean coal technology, members of organizations formed to further the goals of environmental protection or to promote the development and use of clean coal technologies, and other appropriate interested members of the public.

(d) DUTIES.—In furthering the purposes of this section, the Council shall—

(1) facilitate the establishment of technical training for local users and international development personnel;

(2) cause to be established within existing departments and agencies financial assistance programs to support pre-feasibility and feasibility studies for projects that will utilize clean coal technologies and loan guarantee programs designed to facilitate access to capital and credit in order to finance such clean coal technology projects;

(3) develop and execute programs, including the establishment of financial incentives, to encourage and support private sector efforts to export clean coal technologies; and

(4) review ongoing clean coal technology projects and review and approve planned clean coal technology projects, which are sponsored abroad by any Federal Government agency to determine whether such

projects are consistent with the overall goals and objectives of this section.

(e) Data and Information.—The Council shall be responsible for the development of a comprehensive data base and information dissemination system relating to the availability of clean coal technologies and an on-going assessment of the potential need for such technologies particularly in lesser developed countries. The Council shall provide a country-by-country assessment of the potential for the use of clean coal technology. The Council shall make such information available to industry, Federal and international financing organizations, nongovernmental organizations, officials in countries where such clean coal technologies might be utilized, and such others as the Council deems necessary. In developing this data base and on-going assessment, the Council shall consult with the Committee on Renewable Energy Commerce and Trade.

(f) Report.—Within one hundred and eighty days after the Secretary submits the report to the Congress as required by section 409 of Public Law 101-549, the Council, in consultation with those persons referenced in subsection (c) of this section, shall provide to the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate a plan which details actions to be taken in order to address those recommendations and findings made in the report submitted pursuant to section 409 of Public Law 101–549. As a part of the plan required by this subsection, the Secretary shall specifically address the adequacy of financial assistance available from Federal departments and agencies and international financing organizations to aid in the financing of pre-feasibility and feasibility studies and projects that would utilize a clean coal technology in lesser developed countries.

SEC. 5005. COAL FUEL MIXTURES.—Within one year following the date of enactment of this Act, the Secretary shall report to the Committee on Energy and Natural Resources in the United States Senate and the United States House of Representatives on the status of technologies for combining coal with other materials, such as oil or water fuel mixtures. The report shall include—

(1) a technical and economic feasibility assessment of such technologies;

(2) projected developments in such technologies;

(3) an assessment of the market potential of such technologies, including the potential to displace imported crude oil and refined petroleum products;

(4) identification of barriers to commercialization technologies; and

(5) recommendations for addressing barriers to commercialization.

Sec. 5006. Coal Fired Locomotives.—The Secretary shall conduct a research, development, and demonstration program for utilizing "ultra-clean coal-water slurry" in diesel locomotive engines. The program shall address, but not be limited to, the following:

(1) required engine retrofit technology;

(2) coal-fuel production technology;

(3) emission control requirements;

(4) fuel delivery and storage systems requirements; and

(5) other infrastructure required to support commercial deployment.

Sec. 5007. Authorizations.—(a) There is authorized to be appropriated such sums as are necessary for each of fiscal years 1992, 1993, and 1994 for purposes of implementing the program pursuant to section 5001.

(b) There is authorized to be appropriated to carry out section 5002 a total of $20,000,000 for fiscal years 1992 through 1994.

(c) There is authorized to be appropriated such sums as may be necessary for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of section 5004.

Sec. 5008. Establishment of Data Base and Study of Coal Transportation Rates. (a) **Establishment of Data Base.**—The Secretary is authorized and directed to establish a data base containing, to the maximum extent practicable, all transportation rates for rail, pipeline, truck, conveyor belt, barge, and other modes of transporting domestic coal during the period January 1, 1988, through December 31, 1997. The confidentiality of contract rates shall be preserved and public access to the data base shall be provided under appropriate terms and conditions that protect the confidentiality of specific contract rates.

(b) STUDY OF COAL TRANSPORTATION RATES.—The Secretary shall study the rates and distribution patterns of domestic coal to determine the impact of the Clean Air Act Amendments of 1990 and other Federal policies on such rates and distribution patterns. The study shall consider, among other factors—

(1) the extent to which coal transportation rate increases occur as a result of the enactment of the Clean Air Act Amendments of 1990 and other Federal policies;

(2) any increases or decreases in the revenue to variable cost ratios of railroad coal transportation rates during the period of the study and the percentage of the delivered price of coal to electric generating facilities that is attributable to coal transportation rates during this period;

(3) any changes in the distribution patterns of coal among the various regions of the Nation during the study period; and

(4) any electricity rate increases or decreases in the various regions of the Nation during the period of study that are attributable to coal transportation costs.

(c) REPORTS TO CONGRESS.—The Secretary shall submit an interim report to Congress on January 1, 1993, and a final report to Congress, together with any recommendations, on January 1, 1995. The Secretary shall submit an additional report to Congress, with recommendations, on January 1, 1998. The Administrator of the Energy Information Administration and the Chairmen of the Federal Energy Regulatory Commission and the Interstate Commerce Commission shall cooperate fully with the Secretary in the development of the data base and studies authorized by this section.

Subtitle B—Electricity

SEC. 5101. APPLICABILITY OF NEW SOURCE REVIEW TO EXISTING ELECTRIC UTILITY STEAM GENERATING UNITS.—(a) POLLUTION CONTROL PROJECTS.—For purposes of the Clean Air Act, no physical change in, or change in the method of operation of, an electric utility steam generating unit which is undertaken for purposes of pollution control, including the use of natural gas and clean coal technologies, shall be treated as a modification for a specific regulated pollutant for purposes of part C or D of title I of the Clean Air Act if such change does not increase the potential emissions of the specific regulated pollutant from such source above the potential emissions before the change.

(b) Nitrogen Oxide Control Requirements.—

(1) For purposes of the Clean Air Act, any modification, as defined in section 169(c)(2) of such Act, at an existing electric utility steam generating unit subject to section 165 of the Clean Air Act shall be deemed to satisfy the technology requirements of section 165(a)(4) thereof for nitrogen oxides if it meets the following:

(A) For a unit subject to a requirement promulgated pursuant to section 407 of the Clean Air Act, immediately following the modification, the unit shall be required to meet nitrogen oxide emissions limitation specified for that boiler type pursuant to section 407. In the event that the modification precedes the establishment of nitrogen oxide emissions limitations for that boiler type pursuant to section 407, the unit shall be required to meet the applicable emission limitation upon the date required by the regulation.

(B) For an existing electric utility steam generating unit not subject to section 407 of the

Clean Air Act immediately following the modification, the unit shall be required to meet the nitrogen oxide limit equivalent to the limit achievable using "low-NO_x burners".

(2) Any State or local permitting authority shall retain the right to impose more stringent limitations for control of nitrogen oxides.

SEC. 5102. EXCESS CAPACITY STUDY.—The Secretary shall study and report to Congress by June 30, 1992, on any physical impediments to the transfer of excess electrical energy from regions of the country having surpluses to regions of the country having shortages and the reasons therefor.

TITLE VI—RESEARCH, DEVELOPMENT, DEMONSTRATION AND COMMERCIALIZATION ACTIVITIES

SEC. 6001. ENERGY RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIALIZATION PRIORITIES.—The Secretary shall establish priorities for research, development, demonstration, and commercialization activities. These priorities shall include consideration of the following criteria:

(a) the potential to increase the Nation's energy independence and thus reduce reliance on imported oil;

(b) the projected cost-effectiveness of the energy or energy efficiency resource to be produced or saved, including an evaluation of the likelihood of the activities contributing to the achievement of commercialization of new energy technologies;

(c) the comparative environmental and public health impacts of the energy to be produced or saved by the specific activities;

(d) the national security impact of the energy produced or saved, including its projected contribution to the reduction of oil imports and to the diversity of the domestic energy resource mix;

(e) the obstacles inherent in private industry's development of new energy technologies and steps necessary for establishing or maintaining technological leadership in the area of energy and energy efficiency resource technologies, including, but not limited to, solar, fuel cells, fusion, nuclear, clean-coal technologies, oil and natural gas recovery and utilization, and hydrogen;

(f) the contribution of a given activity to fundamental scientific knowledge;

(g) the anticipated impact of the results of activities on targeted industries and industrial and manufacturing processes; and

(h) the contribution to United States competitiveness.

SEC. 6002. MANAGEMENT PLAN.—(a) PLAN PREPARATION.—The Secretary, in consultation with the Energy Advisory Board to the Secretary, shall prepare a management plan for the conduct of research, development, demonstration, and commercialization of energy technologies that is consistent with the purposes of this Act and guided by the priorities set forth in section 6001.

(b) PROPOSALS.—The management plan under subsection (a) shall contain proposals for—

(1) investigation of promising energy and energy efficiency resource technologies that have been identified as potentially significant future contributors to national energy security;

(2) development of contingency energy and energy efficiency resource technologies that have the potential to reduce energy supply vulnerability, and to minimize adverse impacts on the environment, the global climate, and the economy; and

(3) creation of opportunities for export of energy and energy efficiency resource technologies from the United States that can enhance the Nation's competitiveness.

(c) PLAN SUBMISSION.—Within one year after the date of enactment of this section, the Secretary shall submit the first management plan under this section to Congress. Thereafter, the Secretary shall submit a revised management plan biennially at the time of submittal of the President's annual budget submission to the Congress.

SEC. 6003. NATURAL GAS END-USE TECHNOLOGIES.—(a) Program.—The Secretary of Energy shall carry out a program to promote the development and commercialization of new and advanced natural gas utilization technologies including, but not limited to, the following areas:

(1) Stationary source emissions control, and efficiency improvements including combustion systems, industrial processes, natural gas heating and cooling, and cofiring natural gas with coal and waste fuels;

(2) natural gas storage including increased deliverability from existing gas storage facilities and new capabilities for storage near demand centers and on-site storage at major energy consuming facilities;

(3) transportation fuel alternatives and emissions controls including natural gas vehicle commercialization and infrastructure development, and advanced engines and propulsion concepts; and

(4) electrochemical energy conversion including the commercialization of molten carbonate fuel cells

and the development of advanced natural gas-fired fuel cell technologies.

(b) COOPERATIVE AGREEMENTS.—The Secretary shall enter into cooperative agreements under this section.

(c) COST-SHARE.—The Secretary shall not finance more than 50 per centum of the total costs of natural gas utilization technologies selected under this section as estimated by the Secretary as of the date of award of financial assistance.

(d) AUTHORIZATION.—There is authorized to be appropriated to the Secretary such sums as may be necessary to carry out a program in fiscal years 1992, 1993, and 1994, under this section.

SEC. 6004. NATURAL GAS SUPPLY ENHANCEMENT.—(a) PROGRAM.—The Secretary shall carry out a program of research, development and demonstration to increase the recoverable natural gas resource base including, but not limited to, the following areas:

(1) More intensive recovery of natural gas from discovered conventional resources;

(2) Economic recovery of unconventional natural gas resources, including gas from tight sands, Eastern shales, and gas from less permeable formations, coalbed methane and geopressurized reservoirs;

(3) Surface gasification of coal; and

(4) Recovery of methane from biofuels including municipal solid waste.

(b) COOPERATIVE AGREEMENTS.—The Secretary shall enter into cooperative agreements under this section.

(c) COST SHARE.—The Secretary shall not finance more than 50 per centum of the total costs of a project selected under this section as estimated by the Secretary as of the date of award of financial assistance.

(d) AUTHORIZATION.—There is authorized to be appropriated to the Secretary such sums as may be necessary to carry out a program in fiscal years 1992, 1993, and 1994, under this section.

SEC. 6005. HIGH EFFICIENCY HEAT ENGINES.—(a) PROGRAM.—The Secretary shall carry out a program of research, development, demonstration, and commercialization on high efficiency heat engines, emphasizing advanced gas turbine cycles, and the incorporation of energy efficient materials in advanced gas turbine cycles for high efficiency electric and automotive power generation, such as—

(1) advanced combined cycle turbines;

(2) steam-injected gas turbines; and

(3) intercooled steam-injected gas turbines.

(b) JOINT VENTURES.—The Secretary may enter into joint ventures with the appropriate parties to construct and demonstrate high efficiency heat engines.

(c) AUTHORIZATION.—There is authorized to be appropriated not more than $25,000,000 for each of the fiscal years 1992, 1993, and 1994, to carry out the purposes of this section.

TITLE VII—STRATEGIC PETROLEUM RESERVE

SEC. 7001. OIL SECURITY PREMIUM.—(a) Title I of the Energy Policy and Conservation Act (42 U.S.C. 6201) is amended—

(1) in section 152, by striking "and Part C" and inserting in lieu thereof ", Part C, and Part D" in the material preceding paragraph (1);

(2) by redesignating part D as part E;

(3) by redesignating section 181 as section 191; and

(4) by adding the following new part after part C:

"PART D—OIL SECURITY PREMIUM

"PROGRAM GOALS

"SEC. 181. The Secretary of Energy shall establish and implement a program for ensuring that crude oil in storage in the Strategic Petroleum Reserve will be increased at an average rate of at least two hundred and twenty thousand barrels per day, and for meeting the petroleum product needs of the Department of Defense by requiring importers to provide petroleum product for such purposes.

"PERCENTAGE DETERMINATIONS

"SEC. 182. (a) The Secretary shall estimate, for each fiscal year—

"(1) the average consumption in barrels per day of petroleum product by the Department of Defense; and

"(2) the average imports of petroleum product in barrels per day into the United States.

"(b) The Secretary shall add the quantity estimated in subsection (a)(1) to a fill rate of two hundred and twenty thousand barrels per day for the Reserve.

"(c)(1) The Secretary shall determine for each fiscal year the percentage that the sum calculated pursuant to subsection (b) represents of the average imports of petroleum product estimated pursuant to subsection (a)(2).

"(2) The Secretary shall have discretion to modify the percentage determined pursuant to this subsection during the course of any fiscal year—

"(A) to reflect changes in the average consumption in barrels per day of petroleum product by the Department of Defense;

"(B) to reflect changes in the average imports of petroleum product in barrels per day into the United States;

"(C) if the Department of Defense is unable to take delivery of petroleum product provided pursuant to this part due to lack of storage capacity or related facilities;

"(D) to reflect any suspension of fill operations pursuant to subsection 159(e) of the Energy Policy and Conservation Act (42 U.S.C. 6240);

"(E) if the Secretary is unable to take delivery of petroleum product provided pursuant to this part due to lack of Reserve storage capacity or related facilities; or

"(F) if the provision of two hundred and twenty thousand barrels per day of petroleum product for the Reserve in any fiscal year would lead to an aggregate of more than one billion barrels of petroleum product in the Reserve.

"PROVISION OF PETROLEUM PRODUCT

"SEC. 183. (a) The Secretary shall provide, through regulations or orders issued under this part, that each importer (as defined in section 152(2)) shall provide to the United States at no cost in each fiscal year petroleum product in an amount equal to the percentage determined in section 182(c) of the amount of petroleum product—

"(1) which is entered into the United States during any such fiscal year for consumption, use, or warehousing; and

"(2) which is owned by such importer at the first place of storage in the United States.

"(b) Through regulations or orders issued under this part, the Secretary shall reduce the amount of petroleum product deemed to be owned by an importer for purposes of subsection (a) by an amount equal to the amount of petroleum product which is entered into the United States for consumption, use, or warehousing and which is owned by such importer at the first place of storage in the United States and then is refined into another petroleum product and exported from the United States.

"(c) Through regulations or orders issued under this part, the Secretary shall require—

"(1) that petroleum product provided for the Reserve by an importer pursuant to this part be crude oil or other designated petroleum product for which there are authorized storage facilities;

"(2) that petroleum product provided for the Department of Defense by an importer pursuant to this part be designated petroleum product that meets the needs and specifications of the Department of Defense; and

"(3) that petroleum product provided by an importer pursuant to this part be delivered to designated locations at designated times, and be equivalent in fair market value to the amount of petroleum product otherwise required to be provided by such importer pursuant to subsection (b).

"(d) For purposes of this section, the Secretary shall determine the fair market value of the amount of petroleum product otherwise required of any importer pursuant to subsection (b) at the locations and times that such importer entered petroleum product into the United States for consumption, use, or warehousing.

"EFFECTIVE DATE

"SEC. 184. The provisions of this part shall take effect beginning in fiscal year 1992.".

(b) The table of contents of the Energy Policy and Conservation Act is amended—

(1) by inserting at the end of the items for part C of title I the following items:

"PART D—PETROLEUM PRODUCT PROVIDED BY IMPORTERS TO THE SPR AND THE DEPARTMENT OF DEFENSE

"Sec. 181. Program Goals.
"Sec. 182. Percentage Determinations.
"Sec. 183. Provision of Petroleum Product.
"Sec. 184. Effective Date.";

(2) by redesignating Part D in the items for title I as Part E; and

(3) by redesignating the item for section 181 as the item for section 191.

TITLE VIII—OUTER CONTINENTAL SHELF

SEC. 8001. COASTAL STATE AND COMMUNITY OUTER CONTINENTAL SHELF IMPACT ASSISTANCE.—The Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) is amended by adding a new title V as follows:

"SECTION 1. SHORT TITLE.

"This title may be cited as the 'Coastal State and Community Outer Continental Shelf Impact Assistance Act'.

"SEC. 2. DEFINITIONS.

"For purposes of this title the term—

"(1) 'coastal State' means any State of the United States bordering on the Atlantic Ocean, the Pacific Ocean, the Arctic Ocean, or the Gulf of Mexico;

"(2) 'coast line' has the meaning given such term under the Submerged Lands Act (43 U.S.C. 1301 et seq.);

"(3) 'Secretary' means the Secretary of the Interior; and

"(4) 'new revenues' means:

"(A) all bonuses paid as a result of lease sales conducted pursuant to the Outer Continental Shelf Lands Act on or after February 5, 1991;

"(B) all rents and other moneys payable to the Secretary on or after February 5, 1991, related to a lease issued pursuant to the Outer Continental Shelf Lands Act; and

"(C) all royalties attributable to a well or mining operation from which production commenced on or after February 5, 1991, and payable to the Secretary under the Outer Continental Shelf Lands Act;

plus interest thereon.

"SEC. 3. COASTAL STATE AND COMMUNITY OUTER CONTINENTAL SHELF IMPACT ASSISTANCE FUND.

"(a) ESTABLISHMENT.—There is established an interest bearing account in the Treasury of the United States to be known as the Coastal State and Community Outer Continental Shelf Impact Assistance Fund (hereinafter in this Act referred to as 'the Fund').

"(b) PAYMENTS TO FUND.—Beginning in fiscal year 1992, the Secretary shall pay into the Fund not later than sixty days after the end of the preceding fiscal year, an amount equal to 37.5 per centum of all new revenues, as defined herein, derived during the preceding fiscal year which are attributable to an Outer Continental Shelf lease any part of which is within two hundred geographical miles of the coast line.

"SEC. 4. DISPOSITION OF FUND.

"(a) STATE IMPACT ASSISTANCE.—(1) Six months after the end of fiscal year 1991, and annually thereafter, the Secretary shall transmit to the coastal State the revenues payable to such coastal State pursuant to this title, plus interest thereon.

"(2) The amounts to be paid to coastal States under this subsection shall be, with respect to any such State for any fiscal year, the sum of the amounts calculated, with respect to such State, pursuant to subparagraphs (A), (B), and (C):

"(A) An amount which bears, to one-half of the amount available in the Fund for such fiscal year, the same ratio that the amount of Outer Continental Shelf acreage which is adjacent to such State and which is newly leased by the Federal Government in the immediately preceding fiscal year bears to the total amount of Outer Continental Shelf acreage which is newly leased by the Federal Government in such preceding year.

"(B) An amount which bears, to one-quarter of the amount available in the Fund for such fiscal year, the same ratio that the volume of oil and natural gas produced in the immediately preceding fiscal year from the Outer Continental Shelf acreage which is adjacent to such State and which is leased by the Federal Government bears to the total volume of oil and natural gas produced in such year from all of the Outer Continental Shelf acreage which is leased by the Federal Government.

"(C) An amount which bears, to one-quarter of the amount available in the Fund for such fiscal year, the same ratio that the volume of oil and natural gas produced from Outer Continental Shelf acreage leased by the Federal Government which is first landed in such State in the immediately preceding fiscal year bears to the total volume of oil and natural gas produced from all Outer Continental Shelf acreage leased by the Federal Government which is first landed in all of the coastal States in such year.

"(3) For purposes of making calculations under paragraph (2), Outer Continental Shelf acreage is adjacent to a particular coastal State if such acreage lies on that State's side of the extended lateral seaward boundaries of such State. The extended lateral seaward boundaries of a coastal State shall be determined as follows:

"(A) If lateral seaward boundaries have been clearly defined or fixed by an interstate compact, agreement, or judicial decision (if entered into, agreed to, or issued before the date of the enactment of this paragraph), such boundaries shall be extended on the basis of the principles of delimitation used to so define or fix them in such compact, agreement, or decision.

"(B) If no lateral seaward boundaries, or any portion thereof, have been clearly defined or fixed by an interstate compact, agreement, or judicial decision, lateral seaward boundaries shall be determined according to the applicable principles of law, including the principles of the Convention on the Territorial Sea and the Contiguous Zone, and extended on the basis of such principles.

"(C) If, after the date of enactment of this paragraph, two or more coastal States enter into or amend an interstate compact or agreement in order to clearly define or fix lateral seaward boundaries, such boundaries shall thereafter be extended on the basis of the principles of delimitation used to so define or fix them in such compact or agreement.

"(b) COUNTY AND COMMUNITY IMPACT ASSISTANCE.—The revenues paid by the Secretary to a coastal State under subsection (a) shall be used by such State and its subdivisions, as the legislature of the State may direct, giving priority to those subdivisions of the State socially or economically impacted by development of minerals on the Outer Continental Shelf, for (i) planning, (ii) construction and maintenance of public facilities, and (iii) provision of public services.

"SEC. 5. RELATIONSHIP TO OTHER LAW.

"The payment of funds pursuant to this title shall be in addition to any payments made to a State under any other provision of this Act or any other provision of law.".

SEC. 8002. REPORT ON THE AVAILABILITY OF THE OUTER CONTINENTAL SHELF FOR LEASING.—(a) REPORT TO CONGRESS.—Within six months after the date of enactment of this Act, the President shall submit a report to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate containing the President's recommendations and findings regarding the availability of areas of the Outer Continental Shelf for oil and gas leasing, development and production.

(b) REPORT CONTENTS.—Such report shall contain but not be limited to the following findings and information:

(1) oil and gas production potential on the Outer Continental Shelf by region;

(2) historical data regarding oil and gas production on the Outer Continental Shelf by region;

(3) the extent to which production from areas of the Outer Continental Shelf currently under moratoria as a result of the decision of the President announced June 26, 1990 would reduce United States dependence on oil from the Middle East and on oil produced by

members of the Organization of Petroleum Exporting Countries;

(4) a comparison by Outer Continental Shelf region and on a national basis of the number of oil spills and amount of spilled oil resulting from Outer Continental Shelf production and the number of oil spills and amount of spilled oil caused by vessels transporting imported oil to the United States;

(5) an estimate by region and on a national basis of the net change in the oil spill risk as imports of oil decrease in response to production from new leases on the Outer Continental Shelf;

(6) at least one proposal for an alternative to the current OCS process that would provide for a staged requirement for environmental information and public comment thereon at critical points in the leasing process and during the post-leasing exploration and development phases. Any such proposal shall assume that a potential lessee will be offered full rights to exploration and development at the time of lease sale subject to cancellation. Any proposal under this paragraph shall specify the criteria to be used for cancellation based on environmental considerations;

(7) an analysis of the compensation criteria for OCS lease cancellation under current law, recommend-

ed changes thereto, and recommendations for any changes in such compensation under any proposal under paragraph (6); and

(8) identification of gas prone areas under administrative or legislative moratoria.

TITLE IX—OIL AND GAS LEASING IN THE ARCTIC NATIONAL WILDLIFE REFUGE

Subtitle A—Statement of Purpose and Policy and Definitions

SEC. 9101. PURPOSE AND POLICY.—The Congress hereby declares that it is the purpose and policy of this title:

(a) to authorize competitive oil and gas leasing and development to proceed on the Coastal Plain in a manner consistent with protection of the environment, maintenance of fish and wildlife and their habitat, and the interests of the area's subsistence users; and

(b) to provide a new source of funding for energy related programs and projects designed to enhance the Nation's energy security and reduce dependence on imported oil.

SEC. 9102. DEFINITIONS.—When used in this title the term—

(a) "Coastal Plain" means that area identified as such on the map entitled "Arctic National Wildlife Refuge", dated August 1980, as referenced in section

1002(b) of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142(b)(1)) comprising approximately one million five hundred forty-nine thousand acres; and

(b) "Secretary" means the Secretary of the Interior or the Secretary's designee.

Subtitle B.—Congressional Determination of Compatibility

SEC. 9201. CONGRESSIONAL DETERMINATION.—Congress hereby determines that oil and gas activities authorized and conducted on the Coastal Plain pursuant to this title so as to result in no significant adverse effect on fish and wildlife, their habitat, and the environment, shall be deemed to be compatible with the major purposes for which the Arctic National Wildlife Refuge was established and no further findings or determinations of compatibility by the Secretary under the National Wildlife Refuge System Administration Act (16 U.S.C. 668 dd(d)(1)(A)) are required to implement this Congressional determination.

Subtitle C.—Coastal Plain Competitive Leasing Program

SEC. 9301. LEASING PROGRAM FOR LANDS WITHIN THE COASTAL PLAIN.—(a) The Congress hereby authorizes and directs the Secretary and other appropriate Federal officers and agencies to take such actions as are necessary to establish and implement a competitive oil and gas leasing program that will result in an environmentally sound program for the exploration, development, and production of the oil and gas resources of the Coastal Plain. Activities pursuant to such program shall be undertaken:

(1) in accordance with the standards for protection of the environment as required by subtitle D of this title; and

(2) in a manner to ensure the receipt of fair market value by the public for the mineral resources to be leased.

(b) This title shall be the sole authority for leasing on the Coastal Plain.

SEC. 9302. RULES AND REGULATIONS.—(a) The Secretary shall prescribe such rules and regulations as may be necessary to carry out the purposes and provisions of this title, including rules and regulations relating to protection of the environment of the Coastal Plain, as required by subtitle D of this title. Such rules and regulations shall be promulgated within nine months after the date of enactment of this title and shall, as of their effective date, apply to all operations conducted under a lease issued or maintained under the provisions of this title and all operations on the Coastal Plain related to the exploration, development and production of oil and gas.

(b) In the formulation and promulgation of rules and regulations under this title, the Secretary shall request and give due consideration to the views of appropriate officials of the State of Alaska and the Government of Canada. The Secretary shall also consult with the Environmental Protection Agency and the Army Corps of Engineers in developing rules and regulations relating to the environment.

(c) The Secretary shall periodically review and, if appropriate, revise the rules and regulations issued under subsection (a) of this section to reflect any significant biological, environmental, or engineering data which come to the Secretary's attention.

SEC. 9303. ADEQUACY OF DEPARTMENT OF THE INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT.—(a) The "Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain prepared pursuant to section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142), and section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)), is hereby found by the Congress to be adequate to satisfy the legal requirements under the National Environmental Policy Act of 1969 with respect to actions authorized to be taken by the Secretary to develop and promulgate the regulations for the establishment of a leasing program authorized by this title prior to conducting the first lease sale.

(b) Except as provided in subsection (a) of this section, nothing in this title shall be considered or construed as otherwise limiting or affecting in any way the applicability of section 102(2)(C) of the National Environmental Policy Act of 1969 to all phases of oil and gas leasing, exploration, development and production and related activities conducted under or associated with the leasing program authorized by this title, nor shall anything in this title be considered or construed as in any way limiting or affecting the applicability of any other Federal or State law relating to the protection of the environment.

SEC. 9304. LEASE SALES.—(a) Lands may be leased pursuant to the provisions of this title to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act, as amended (30 U.S.C. 181).

(b) The Secretary shall, by regulation, establish procedures for—

(1) receipt and consideration of sealed nominations for any area in the Coastal Plain for inclusion in, or exclusion from, a lease sale;

(2) public notice of and comment on designation of areas to be included in, or excluded from, a lease sale;

(3) review by the State of Alaska and local governments in Alaska which may be impacted by the proposed leasing; and

(4) periodic consultation with the State of Alaska and local governments in Alaska, oil and gas lessees, and representatives of other individuals or organizations engaged in activity in or on the Coastal Plain including those involved in subsistence uses and recreational activities.

(c) The Secretary shall, by regulation, provide for lease sales of lands on the Coastal Plain. When lease sales are to be held, they shall occur after the nomination process provided for in subsection (b) of this section. For the first lease sale, the Secretary shall, consistent with the requirements set forth in subtitle D of this title, offer for lease those acres receiving the greatest number of nominations, but not to exceed a total of three hundred thousand acres. If the total acreage nominated is less than three hundred thousand acres, he shall include in such sale any other acreage which he believes has the highest resource potential, but in no event shall more than three hundred thousand acres of the Coastal Plain be offered in such sale. Thereafter, no more than three hundred thousand acres of the Coastal Plain may be leased in any one lease sale. The initial lease sale shall be held within eighteen months of the issuance of final regulations by the Secretary. The second lease sale shall be held thirty-six months after the initial sale, with additional sales conducted every twenty-four months thereafter so long as sufficient interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

(d) Areas of the Coastal Plain deemed by the Secretary to be of particular environmental sensitivity may be excluded from leasing by the Secretary. The Secretary shall notify the Committee on Energy and Natural Resources of the United States Senate and the Committee on Interior and Insular Affairs of the United States House of Representatives ninety days in advance of excluding any such areas from leasing. If the Secretary later determines that exploration, development, or production will result in no significant adverse effect on fish and wildlife, their habitat, and the environment, the Secretary shall, consistent with the provisions of subsection (c) of this section, offer such lands for leasing.

SEC. 9305. GRANT OF LEASES BY THE SECRETARY.—(a) The Secretary is authorized to grant to the highest responsible qualified bidder by sealed competitive bid any lands to be leased on the Coastal Plain upon payment by the lessee of such bonus as may be accepted by the Secretary and of such royalty as may be fixed in the lease, which shall be not less than 12½ per centum in amount or value of the production removed or sold from the lease.

(b) The Secretary shall not accept a bid for a lease if the Secretary finds, after notice and hearing, that the bidder is not meeting diligent development requirements on any other Federal mineral lease.

(c) ANTITRUST REVIEW.—(1) Following each notice of a proposed lease sale and before the acceptance of bids and the issuance of leases based on such bids, the Secretary shall allow the Attorney General, in consultation with the Federal Trade Commission, thirty days to review the results of such lease sale, except that the Attorney General, after consultation with the Federal Trade Commission, may agree to a shorter review period.

(2) The Attorney General may, in consultation with the Federal Trade Commission, conduct such antitrust review on the likely effects the issuance of such leases would have on competition as the Attorney General, after consultation with the Federal Trade Commission, deems appropriate and shall advise the Secretary with respect to such review. The Secretary shall provide such information as the Attorney General, after consultation with the Federal Trade Commission, may require in order to conduct any antitrust review pursuant to this paragraph and to make recommendations pursuant to paragraph (3) of this subsection.

(3) The Attorney General, after consultation with the Federal Trade Commission, may make such recommendations to the Secretary, including the nonacceptance of any bid or the imposition of terms or conditions on any lease, as may

be appropriate to prevent any situation inconsistent with the antitrust laws. If the Secretary determines, or if the Attorney General advises the Secretary, after consultation with the Federal Trade Commission and prior to the issuance of any lease, that such lease would create or maintain a situation inconsistent with the antitrust laws, the Secretary may—

(A) refuse to accept an otherwise qualified bid for such lease, or refuse to issue such lease, notwithstanding subsection (a) of this section; or

(B) modify or impose terms or conditions on the lease, consistent with advice provided by the Attorney General.

(4) The Secretary may issue a lease notwithstanding adverse advice from the Attorney General, or refuse to impose recommended terms or conditions, if the Secretary makes specific findings that approval of the lease is necessary to carry out the purposes of this title, that approval is consistent with the public interest, and that there are no reasonably available alternatives that would have significantly less anticompetitive effects. In such event, the Secretary must notify the lessee and the Attorney General of such findings.

(5) Nothing in this subsection shall restrict the authority of the Attorney General, the Federal Trade Commission, or any other Federal department or agency to secure informa-

tion, conduct reviews, make recommendations, or seek appropriate relief.

(d) SECRETARY'S APPROVAL FOR SALE, EXCHANGE, ASSIGNMENT, OR OTHER TRANSFER OF LEASES.—No lease issued under this title may be sold, exchanged, assigned, or otherwise transferred except with the approval of the Secretary. Prior to any such approval, the Secretary shall consult with, and give due consideration to the views of, the Attorney General.

(e) NO ANTITRUST IMMUNITY OR DEFENSES.—Nothing in this title shall be deemed to convey to any person, association, corporation, or other business organization immunity from civil or criminal liability, or to create defenses to actions, under any antitrust law.

(f) DEFINITIONS.—As used in this section, the term—

(1) "antitrust review" shall be deemed an "antitrust investigation" for the purposes of the Antitrust Civil Process Act (15 U.S.C. 1311).

(2) "antitrust laws" means those Acts set forth in Section 1 of the Clayton Act, 15 U.S.C. 12, as amended.

SEC. 9306. LEASE TERMS AND CONDITIONS.—An oil and gas lease issued pursuant to this title shall—

(a) be for a tract consisting of a compact area not to exceed two thousand five hundred sixty acres;

(b) be for an initial period of ten years and shall be extended for so long thereafter as oil or gas is produced in paying quantities from the lease or unit area to which the lease is committed or for so long as drilling or reworking operations, as approved by the Secretary, are conducted on the lease or unit area;

(c) require the payment of royalty as provided for in section 9305 of this title;

(d) require approval of an exploration plan, as provided for in section 9307 of this title;

(e) require approval of a development and production plan, as required in section 9307 of this title;

(f) require posting of bond required by section 9308 of this title;

(g) provide for the suspension of the lease during the initial lease term or thereafter pursuant to section 9309 of this title;

(h) provide for the cancellation of the lease during the initial lease term or thereafter pursuant to section 9310 of this title;

(i) contain the terms and conditions relating to protection of fish and wildlife, their habitat, and the environment, as required by subtitle D of this title;

(j) contain such rental and other provisions as the Secretary may prescribe at the time of offering the area for lease; and

(k) contain such other provisions as the Secretary determines necessary to ensure compliance with the provisions of this title and the regulations issued thereunder.

SEC. 9307. EXPLORATION AND DEVELOPMENT AND PRODUCTION PLANS.—

(a) EXPLORATION PLANS.—All exploration activities pursuant to any lease issued or maintained under this title shall be conducted in accordance with an approved exploration plan or an approved revision of such plan. Prior to commencing exploration pursuant to any oil and gas lease issued or maintained under this title, the holder thereof shall submit an exploration plan to the Secretary for approval. Such plan may apply to more than one lease held by a lessee in any region of the Coastal Plain, or by a group of lessees acting under a unitization, pooling, or drilling agreement, and shall be approved by the Secretary if the Secretary finds that such plan is consistent with the provisions of this title and other applicable law.

(b) OIL AND GAS DEVELOPMENT AND PRODUCTION PLANS.—All development and production pursuant to a lease issued or maintained pursuant to this title shall be conducted in accordance with an approved development and production plan. Prior to commencing development or production pursuant to any oil and gas lease issued or maintained under this title, the holder thereof shall submit a development and production plan to the Secretary for approval. Such plan may apply to more than one lease held by a lessee in any region of the Coastal Plain, or by a group of lessees acting under a unitization, pooling, or drilling agreement, and shall be approved by the Secretary if the Secretary finds that such plan is consistent with the provisions of this title and other applicable law.

(c) REQUIREMENTS APPLICABLE TO EXPLORATION PLANS AND DEVELOPMENT AND PRODUCTION PLANS.—Exploration plans and development and production plans shall include where applicable—

(1) the names and legal addresses of the following persons: the operator, contractors, subcontractors and the owners or lessees other than the operator;

(2) a map or maps showing: (A) the location of a point of reference selected by the operator within the area covered by the plan of operations showing, in relation to that point, existing and proposed access routes or roads within the area, the boundaries of proposed surface disturbance and location of all survey lines; (B) the location of proposed drilling sites, wellsite

layout, and all surface facilities; (C) sources of construction materials within the area including but not limited to gravel; and (D) the location of ancillary facilities including but not limited to camps, sanitary facilities, water supply, disposal facilities, pipelines, fuel storage facilities, storage facilities, base of operations, and airstrips. A point of reference selected by the operator within the area of operations shall be marked with a ground monument;

(3) a description of: (A) all surface and ancillary facilities, including but not limited to camps, sanitary facilities, water supply, disposal facilities, pipelines, fuel storage facilities, storage facilities, base of operations, and airstrips; and (B) the major equipment to be used in the operations, including but not limited to equipment and methods for the transport of all waters used in or produced by operations, and of the proposed method of transporting such equipment within the area covered by the plan of operations including to and from the site;

(4) an estimated schedule for any phase of operations of which review by the Secretary is sought and the anticipated date of operation completion;

(5) the nature and extent of proposed operations;

(6) plans for reclamation, including:

(A) the anticipated reclamation work to be performed;

(B) a proposed schedule of reclamation activities to be performed; and

(C) a detailed estimate of reclamation costs;

(7) methods for disposal of all wastes and hazardous and toxic substances;

(8) an affidavit stating that the operations planned will be in compliance with all applicable Federal, State, and local laws and regulations;

(9) contingency plans in case of spills, leaks, or other accidents; and

(10) such additional information as may be required by the Secretary to ensure that the proposed activities are consistent with this title, as well as other applicable Federal and State environmental laws.

(d) PROCEDURES FOR PLAN APPROVAL.—(1) After an exploration or development and production plan is submitted for approval, the Secretary shall promptly publish notice of the submission and availability of the text of the proposed plan in the Federal Register and a newspaper of general circulation in the State of Alaska and provide an opportunity for written public comment.

(2) Within one hundred twenty days after receiving an exploration or development and production plan, the Secre-

tary shall determine, after taking into account any comment received under paragraph (1) of this subsection, whether the activities proposed in the plan are consistent with this title and other applicable provisions of Federal and State law. If that determination is in the affirmative, the Secretary shall return the plan along with a statement of any modifications necessary for its approval. The Secretary, as a condition of approving any plan under this section—

(A) may require modifications to the plan that the Secretary considers necessary or appropriate to make it consistent with this title and other applicable law. The Secretary shall assess reasonable fees or charges for the reimbursement of all necessary and reasonable research, administrative, monitoring, enforcement, and reporting costs associated with reviewing the plan and monitoring its implementation; and

(B) shall require such periodic reports regarding the carrying out of the drilling and related activities as may be necessary or appropriate for purposes of determining the extent to which the plan is being complied with and the effectiveness of the plan in ensuring that the drilling and related activities are consistent with this title and other applicable provisions of Federal and State law.

(e) MODIFICATION OF PLANS.—If at any time while activities are being carried out under a plan approved under this section, the Secretary, on the basis of available information, determines that the continuation of any particular activity under the plan is likely to result in a significant adverse effect on fish or wildlife, their habitat, or the environment, the Secretary, after consultation with the lessee shall—

(1) make modifications to part or all of the plan as necessary or appropriate to avoid the significant adverse effect;

(2) temporarily suspend part or all of the drilling or related activity under the plan for such time as the Secretary considers necessary or appropriate to avoid such significant adverse effect; or

(3) terminate and cancel the plan where actions under paragraphs (1) or (2) will not avoid the significant adverse effect.

SEC. 9308. BONDING REQUIREMENTS.—(a) REQUIREMENT FOR PERFORMANCE BOND.—After approval of an exploration or development and production plan, the lessee shall be required to file with the Secretary a suitable performance bond. The bond shall be conditioned upon compliance with all the terms and conditions of the lease and all applicable laws. Such performance bond is in addition to and not in lieu of any bond or security deposit required by other regulatory authorities or required by any other provision of law. The lessee may file either a surety bond, or a personal bond consisting of cash or negotiable Treasury bonds of the United States. When negotiable Treasury bonds serve as the personal bond, they shall be accompanied by a proper conveyance to the Secretary of full authority to sell such securities in case of a default in the performance of the terms and conditions of the lease.

(b) AMOUNT OF PERFORMANCE BOND.—The performance bond shall be in an amount:

(1) to be determined by the Secretary to provide for reclamation of the lease site in accordance with an approved or revised exploration or development and production plan; plus

(2) an amount set by the Secretary consistent with the type of operations proposed, to provide the means for rapid and effective cleanup, and to minimize damages resulting from an oil spill, the escape of gas, refuse, domestic wastewater, hazardous or toxic substances, or fire caused by oil and gas activities.

(c) ADJUSTMENT OF BOND TO CONFORM TO REVISED PLAN.—In the event that an approved exploration or development and production plan is revised, the Secretary may adjust the amount of the bond to conform to such modified plan.

(d) DURATION OF BOND.—The responsibility and liability of the lessee and its surety under the bond or security deposit shall continue until such time as the Secretary determines that there has been compliance with the terms and conditions of the lease and all applicable law.

(e) TERMINATION OF LIABILITY.—Within sixty days after determining that there has been compliance with the terms and conditions of the lease and all applicable laws, the Secretary, after consultation with affected Federal and State agencies, shall notify the lessee that the period of liability under the bond or security deposit has been terminated.

SEC. 9309. LEASE SUSPENSION.—The Secretary may direct or assent to the suspension of operations and production under any lease granted under the terms of this title: (1) in the interest of conservation of the resource; (2) where there is no available system to transport the resource; or (3) where there is a threat of a significant adverse effect upon fish or wildlife, their habitat or the environment. If such a suspension is directed or assented to by the Secretary, any payment of rental prescribed by such lease shall be suspended during such period of suspension of operations and production, and the term of the lease shall be extended by adding any such suspension period thereto.

SEC. 9310. LEASE CANCELLATION.—(a) CANCELLATION OF NONPRODUCING LEASE.—Whenever the owner of a nonproducing lease fails to comply with any of the provisions of this title, or of any applicable provision of Federal or State environmental law, or of the lease, or of any regulation issued under this title, such lease may be cancelled by the Secretary if such default continues for the period of thirty days after mailing of notice by registered letter to the lease owner at the lease owner's record post office address.

(b) CANCELLATION OF PRODUCING LEASE.—Whenever the owner of any producing lease fails to comply with any of the provisions of this title, or of any applicable provision of Federal or State environmental law, or of the lease, or of any regulation issued under this title, such lease may be forfeited and cancelled by any appropriate proceeding brought by the Secretary in any United States district court having jurisdiction under the provisions of this title.

(c) ADDITIONAL PROVISIONS.—(1) In addition to the authority for lease cancellation provided for by subsections (a) and (b) of this section, any lease may be cancelled at any time, if the Secretary determines, after a hearing, that—

(A) continued activity pursuant to such lease is likely to result in a significant adverse effect to fish or wildlife, their habitat, or the environment, or is likely to result in serious harm or damage to human life, to property, or to the national security or defense; and

(B) the likelihood of a significant adverse effect will not disappear within a reasonable period of time or the threat of harm or damage will not disappear or decrease to any acceptable extent within a reasonable period of time.

(2) Such cancellation shall not occur unless and until operations under such lease or permit shall have been under suspension, or temporary prohibition, by the Secretary, with due extension of any lease term continuously for a period of five years, or for a lesser period upon request of the lessee.

(3) Cancellation under this subsection shall entitle the lessee to receive such compensation as the lessee demonstrates to the Secretary to be equal to the lesser of (A) the fair market value of the cancelled rights as of the date of cancellation, taking account of both anticipated revenues from the lease and anticipated costs, including the costs of compliance with all applicable regulations and operating orders, liability for cleanup costs or damages, or both, in the case of an oil spill or spill of other hazardous or toxic materials, fines, damages, penalties, or removal costs assessed pursuant to section 9315 of this title or other State or Federal environmental laws, any fees paid pursuant to section 9503 of this title, and all other costs reasonably anticipated on the lease; or (B) the excess, if any, over the lessee's revenues

from the lease (plus interest thereon from the date of receipt to the date of reimbursement) of all consideration paid for the lease and all direct expenditures made by the lessee (exclusive of any fines, damages, penalties, or removal costs assessed pursuant to section 9315 of this Act or other State or Federal environmental laws, and any fees paid pursuant to section 9503 of this Act) after the date of issuance of such lease and in connection with exploration or development, or both, pursuant to the lease (plus interest on such consideration and such expenditures from date of payment to date of reimbursement).

SEC. 9311. ASSIGNMENT OR SUBLETTING OF LEASES.—No lease issued under the authority of this title shall be assigned or sublet, except with the consent of the Secretary.

SEC. 9312. RELINQUISHMENT.—The lessee may, at the discretion of the Secretary, be permitted at any time to make written relinquishment of all rights under any lease issued pursuant to this title. The Secretary shall accept the relinquishment by the lessee of any lease issued under this title where there has not been surface disturbance on the lands covered by the lease.

SEC. 9313. UNITIZATION.—For the purpose of conserving the natural resources of any oil or gas pool, field, or like area, or any part thereof and in order to avoid the unnecessary duplication of facilities, to protect the environment of the Coastal Plain, and to protect correlative rights, the Secretary shall require to the greatest extent practicable, that lessees unite with each other in collectively adopting and operating under a cooperative or unit plan of development for operation of such pool, field, or like area, or any part thereof. The Secretary is also authorized and directed to enter into such agreements as are necessary or appropriate for the protection of the United States against drainage.

SEC. 9314. OIL AND GAS INFORMATION.—(a)(1) Any lessee or permittee conducting any exploration for, or development or production of, oil or gas pursuant to this title shall provide the Secretary access to all data and information (including processed, analyzed, and interpreted information) obtained from such activity and shall provide copies of such data and information as the Secretary may request. Such data and information shall be provided in accordance with regulations which the Secretary shall prescribe.

(2) If interpreted information provided pursuant to paragraph (1) of this subsection is provided in good faith by the lessee or permittee, such lessee or permittee shall not be responsible for any consequence of the use or of reliance upon such interpreted information.

(3) Whenever any data or information is provided to the Secretary, pursuant to paragraph (1) of this subsection—

(A) by a lessee or permittee, in the form and manner of processing which is utilized by such lessee or permittee in the normal conduct of business, the Secretary shall pay the reasonable cost of reproducing such data and information;

(B) by a lessee or permittee, in such other form and manner of processing as the Secretary may request, the Secretary shall pay the reasonable cost of processing and reproducing such data and information.

(b) The Secretary shall prescribe regulations to: (1) assure that the confidentiality of privileged or proprietary information received by the Secretary under this section will be maintained; and (2) set forth the time periods and conditions which shall be applicable to the release of such information.

SEC. 9315. REMEDIES AND PENALTIES.—(a) GENERAL.—Except as provided in section 9316 of this title, the district courts of the United States shall have jurisdiction of cases and controversies arising out of, or in connection with, any lease issued under this title. Proceedings may be instituted in the judicial district in which any defendant resides or may be found, or in the judicial district in which the Coastal Plain is located.

(b) ACTIONS FOR RELIEF.—At the request of the Secretary, the Attorney General or a United States Attorney shall institute a civil action in the district court of the United

States for the district in which any defendant resides or may be found, or in the judicial district in which the Coastal Plain is located, for a temporary restraining order, injunction, or other appropriate remedy to enforce any provision of this title, any regulation or order issued under this title, or any term of a lease issued pursuant to this title.

(c) CIVIL PENALTIES.—If any person fails to comply with any provision of this title, or any term of a lease issued pursuant to this title, or any regulation or order issued under this title, after notice of such failure and expiration of any reasonable period allowed for corrective action, such person shall be liable for a civil penalty of not more than $10,000 for each day of the continuance of such failure. The Secretary may assess, collect and compromise any such penalty. No penalty shall be assessed until the person charged with a violation has been given an opportunity for a hearing.

(d) CRIMINAL PENALTIES.—Any person who knowingly and willfully: (1) violates any provision of this title, any term of a lease issued pursuant to this title, or any regulation or order issued under the authority of this title designed to protect health, safety, or the environment or conserve natural resources; (2) makes any false statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this title; (3) falsifies, tampers with, or renders inaccurate any monitoring device or method of record required to be maintained under this title; or (4) reveals any data or information required to be kept confidential by this Act, shall, upon conviction, be punished by a fine of not more than $100,000, or by imprisonment for not more than ten years, or both. Each day that a violation under clause (1) of this subsection continues, or each day that any monitoring device or data recorder remains inoperative or inaccurate because of any activity described in clause (3) of this subsection, shall constitute a separate violation.

(e) LIABILITY OF CORPORATE OFFICERS AND AGENTS FOR VIOLATIONS BY CORPORATION.—Whenever a corporation or other entity is subject to prosecution under subsection (d) of this section, any officer or agent of such corporation or entity who knowingly and willfully authorized, ordered, or carried out the proscribed activity shall be subject to the same fines or imprisonment, or both, as provided for under subsection (d) of this section.

(f) CONCURRENT AND CUMULATIVE NATURE OF PENALTIES.—The remedies and penalties prescribed in this title shall be concurrent and cumulative and the exercise of one shall not preclude the exercise of the others. Further, the remedies and penalties prescribed in this title shall be in addition to any other remedies and penalties afforded by any other law or regulation.

(g) REMOVAL COSTS AND LIABILITY FOR DAMAGES.—Notwithstanding any other provision of law, if any area of the Coastal Plain or adjacent State waters has been or is being polluted by discharges of oil or hazardous or toxic substances from exploration, development, or production of oil or gas or related activities, conducted by, or on behalf of, a responsible party, and if the pollution has damaged or is damaging fish or wildlife, their habitat, or the environment of the Coastal Plain or adjacent State waters, or if such pollution is causing a substantial threat of damaging those fish or wildlife, their habitat, or the environment of the Coastal Plain or adjacent State waters, the responsible party shall be jointly, severally and strictly liable for the removal costs and damages specified in this subsection that arise directly out of or directly result from pollution that has damaged, or is damaging or is causing a substantial threat of damaging fish or wildlife, their habitat, or the environment of the Coastal Plain or adjacent State waters. The Secretary shall make a determination with respect to such liability after notice to the responsible party and an opportunity for hearing. Upon failure of the responsible party adequately to control and remove the pollutant or threat, the Secretary, in cooperation with other Federal, State, or local agencies, or in cooperation with the responsible party, or both, shall have the right to accomplish the control and removal at the expense of the responsible party. Funds contained in the Coastal Plain Liability and Reclamation Fund, provided for by section 9503 of this title, may be used to accomplish such control and removal until such time as sufficient funds can be recovered from the responsible party. The removal costs and damages referred to in this subsection are the following—

(1) all necessary removal costs as determined by the Secretary;

(2) damages for injury to, destruction of, loss of, and reclamation of natural resources, including the reasonable costs of assessing such injury, destruction, loss or reclamation; and

(3) damages for economic loss resulting from injury to, or destruction of, real or personal property or natural resources, and loss of subsistence use of natural resources by local residents.

SEC. 9316. EXPEDITED JUDICIAL REVIEW.—Any complaint filed seeking judicial review of an action of the Secretary in promulgating any regulation under this title may be filed only in the United States Court of Appeals for the District of Columbia, and such complaint shall be filed within ninety days from the date of such promulgation, or after such date if such complaint is based solely on grounds arising after such ninetieth day, in which case the complaint must be filed within ninety days after the complainant knew or reasonably should have known of the grounds for the complaint. Any complaint seeking judicial review of any other actions of the Secretary under this title may be filed in any appropriate district court of the United States, and such complaint must be filed within ninety days from the date of the action being challenged, or after such date if such complaint is based solely on grounds arising after such ninetieth day, in which case the complaint must be filed within ninety days after the complainant knew or reasonably should have known of the grounds for the complaint.

SEC. 9317. ANNUAL REPORT TO CONGRESS.—On March 1st of each year following the date of enactment of this title, the Secretary shall prepare and submit to the Congress an annual report on the leasing program authorized by this title.

SEC. 9318. INTERESTS OF THE INUPIAT ESKIMO PEOPLE.—(a) The prohibitions and limitations contained in section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) insofar as they have application to lands or interests therein owned by the Inupiat Eskimo people within the Arctic National Wildlife Refuge, but outside the Coastal Plain, are hereby repealed.

(b) The prohibitions and limitations contained in section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) insofar as they have application to lands or interests therein owned by the Inupiat Eskimo people within the Coastal Plain are hereby repealed as of the day after the first lease sale is held pursuant to this title. With respect to the lands and interests therein described in this subsection, no exploratory drilling activities shall be authorized until the day after such lease sale.

(c) The substantive provisions of the final regulations issued pursuant to this title which establish environmental stipulations, terms and conditions for oil and gas leasing on the Coastal Plain shall apply to the exploration and development of all subsurface property interests owned by the Inupiat Eskimo people within the Arctic National Wildlife Refuge; provided that prior to issuance of such regulations, oil and gas exploration and development activities on the land and interests therein described in subsection (a), shall be governed by the stipulations set forth in appendix 2 of the August 9, 1983, agreement between the Arctic Slope Regional Corporation and the United States.

(d) Any claims for money damages or other available relief brought by Arctic Slope Regional Corporation or Kaktovik Inupiat Corporation alleging that the provisions of this title constitute a taking of contract or property rights under the fifth amendment to the Constitution of the United States may be brought within one hundred and twenty days of its enactment. A claim shall be barred unless a complaint is filed within the time specified. Any such complaint shall be filed in a United States district court, and such court shall have exclusive jurisdiction to determine such proceedings in accordance with the procedures hereinafter provided, and no other court of the United States, of any State, territory, or possession of the United States, or of the District of Columbia, shall have jurisdiction of any claim whether in a proceeding instituted prior to or on or after the date of enactment of this title. Any such proceeding shall be assigned for hearing at the earliest possible date, shall take precedence over all other matters pending on the docket of the district court at that time, and shall be expedited in every way by such court. Any review of an interlocutory or final judgment, decree, or order of such district court may be had only upon direct appeal to the Supreme Court of the United States.

Subtitle D—Coastal Plain Environmental Protection

SEC. 9401. (a) NO SIGNIFICANT ADVERSE EFFECT STANDARD TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—The Secretary shall administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, and the environment, and that shall require the application of the best commercially available technology for oil and gas exploration, development, and production, on all new exploration, development, and production operations, and whenever practicable, on existing operations.

(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—The Secretary shall also require, with respect to any proposed drilling and related activities, that –

(1) a site-specific analysis be made of the probable effects, if any, that the drilling or related activities will have on fish and wildlife, their habitat, and the environment;

(2) a mitigation plan be implemented to avoid, minimize and compensate (in that order and to the extent practicable) any significant adverse effect assessed under paragraph (1) of this subsection; and

(3) the development of the mitigation plan shall occur after consultation with the agency or agencies having jurisdiction over matters mitigated by the plan.

SEC. 9402. REGULATIONS TO PROTECT THE COASTAL PLAIN'S FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS, AND THE ENVIRONMENT.—(a) Prior to implementing the leasing program authorized by subtitle C of this title, the Secretary shall prepare and promulgate regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures designed to ensure that the activities undertaken in the Coastal Plain authorized by this title are conducted in a manner consistent with the purposes and environmental requirements of this title.

(b) The proposed regulations, lease terms, conditions, restrictions, prohibitions, and stipulations for the leasing program authorized by subtitle C of this title shall require compliance with all applicable provisions of Federal and State environmental law and shall also require—

(1) as a minimum, the safety and environmental mitigation measures set forth in items one through twenty-nine (1 through 29) at pages 167 through 169 of the "Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain;

(2) seasonal limitations on exploration, development, and related activities, where necessary, to avoid significant adverse effects during periods of concentrated fish and wildlife breeding, denning, nesting, spawning, and migration;

(3) that exploration activities, except for surface geological studies, be limited to the period between approximately November 1 and May 1 and that exploration activities will be supported by ice roads, winter trails with adequate snow cover, ice pads, ice airstrips, and air transport methods: *Provided*, That such exploration activities may be permitted at other times if the

Secretary determines, after affording an opportunity for public comment and review, that special circumstances exist necessitating that exploration activities be conducted at other times of the year and he finds that such exploration will have no significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain;

(4) design safety and construction standards for all pipelines and any access and service roads that—

(A) minimize, to the maximum extent possible, adverse effects upon the passage of migratory species such as caribou; and

(B) minimize adverse effects upon the flow of surface water by requiring the use of culverts, bridges, and other structural devices;

(5) prohibitions on public access and use on all pipeline access and service roads;

(6) stringent reclamation and rehabilitation requirements, consistent with the standards set forth in this title, requiring the removal from the Coastal Plain of all oil and gas development and production facilities, structures and equipment upon completion of oil and gas production operations: *Provided,* That the Secretary may exempt from the requirements of this paragraph those facilities, structures or equipment which

the Secretary determines would assist in the management of the Arctic National Wildlife Refuge and which are donated to the United States for that purpose;

(7) appropriate prohibitions or restrictions on access by all modes of transportation;

(8) appropriate prohibitions or restrictions on sand and gravel extraction;

(9) consolidation of facility siting;

(10) appropriate prohibitions or restrictions on use of explosives;

(11) avoidance, to the extent practicable, of springs, streams, and river system; the protection of natural surface drainage patterns, wetlands, and riparian habitats; and the regulation of methods or techniques for developing or transporting adequate supplies of water for exploratory drilling;

(12) avoidance or reduction of air traffic-related disturbance to fish and wildlife;

(13) treatment and disposal of hazardous and toxic wastes, solid wastes, reserve pit fluids, drilling muds and cuttings, and domestic wastewater, in accordance with applicable Federal and State environmental law;

(14) fuel storage and oilspill contingency planning;

(15) research, monitoring, and reporting requirements;

(16) field crew environmental briefings;

(17) avoidance of significant adverse effects upon subsistence hunting, fishing, and trapping by subsistence users;

(18) compliance with applicable air and water quality standards;

(19) appropriate seasonal and safety zone designations around well sites within which subsistence hunting and trapping would be limited;

(20) reasonable stipulations for protection of cultural and archeological resources; and

(21) all other protective environmental stipulations, restrictions, terms, and conditions deemed necessary by the Secretary.

(c) In preparing and promulgating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Secretary shall consider—

(1) the environmental protection standards which governed the initial Coastal Plain seismic exploration program (50 Code of Federal Regulations 37.31–33);

(2) the land use stipulations for exploratory drilling on the KIC–ASRC private lands which are set forth in appendix 2 of the August 9, 1983, agreement

between Arctic Slope Regional Corporation and the United States; and

(3) the operational stipulations for Koniag ANWR Interest lands contained in the draft agreement between Koniag, Incorporated and the United States of America on file with the Secretary on December 1, 1987.

SEC. 9403. SADLEROCHIT SPRING SPECIAL AREA.—(a)(1) The Sadlerochit Spring area, comprising approximately four thousand acres as depicted on the map referenced in section 9102 of this title, is hereby designated to be a special area. Such special area shall be managed so as to protect and preserve the area's unique and diverse character including its fish, wildlife, and subsistence resource values.

(2) Pursuant to subsection (d) of section 9304 of this title, the Secretary may exclude the Sadlerochit Spring Special Area from leasing.

(3) In the event that the Secretary leases the Sadlerochit Spring Special Area, or any part thereof, for purposes of oil and gas exploration, development, production, and related activities, there shall be no surface occupancy of the lands comprising the special area.

(b) The Secretary is authorized to designate other areas of the Coastal Plain as special areas if the Secretary determines that they are of unique character and interest so as to require such special protection. The Secretary shall notify the Committee on Energy and Natural Resources of the United States Senate and the Committee on Interior and Insular Affairs of the United States House of Representatives of the Secretary's intent to designate such areas ninety days in advance of making such designations. Any such areas designated as special areas shall be managed in accordance with the standards set forth in subsection (a) of this section.

SEC. 9404. FACILITY CONSOLIDATION PLANNING.—(a) The Secretary shall, after providing for public notice and comment, prepare and update periodically a plan to govern, guide, and direct the siting and construction of facilities for the exploration, development, production, and transportation of Coastal Plain oil and gas resources. This plan shall have the following objectives:

(1) avoiding unnecessary duplication of facilities and activities;

(2) encouraging consolidation of common facilities and activities;

(3) locating or confining facilities and activities to areas which will minimize impact on fish and wildlife, their habitat, and the environment;

(4) utilizing existing facilities wherever practicable; and

(5) enhancing compatibility between wildlife values and development activities.

(b) The plan prepared under this section shall supplement any comprehensive conservation plan prepared pursuant to the requirements of section 304(g) of the Alaska National Interest Lands Conservation Act of 1980 (94 Stat. 2394).

SEC. 9405. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.—Notwithstanding title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161 et seq.), the Secretary is authorized to grant under section 28 of the Mineral Leasing Act (30 U.S.C. 185) rights-of-way and easements across the Coastal Plain for the transportation of oil and gas under such terms and conditions as may be necessary so as not to result in a significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain. Such terms and conditions shall include requirements that facilities be sited or modified so as to avoid unnecessary duplication of roads and pipelines. The regulations issued pursuant to this title shall include provisions regarding the granting of rights-of-way across the Coastal Plain.

SEC. 9406. ENVIRONMENTAL STUDIES.—In addition to any other environmental studies required by law, subsequent to exploring or developing of any area or region of the

Coastal Plain, the Secretary shall conduct such additional studies to establish environmental information as he deems necessary, and shall monitor the human, marine, and coastal environments of such area or region in a manner designed to provide information which can be used for comparison with any previously collected data for the purpose of identifying any effects on fish or wildlife and their habitat and any significant changes in the quality and productivity of such environments, for establishing trends in the areas studied and monitored, and for designing experiments to identify the causes of such effects or changes.

SEC. 9407. ENFORCEMENT OF SAFETY AND ENVIRONMENTAL REGULATIONS.—(a) RESPONSIBILITY OF THE SECRETARY.—The Secretary shall diligently enforce all regulations, lease terms, conditions, restrictions, prohibitions, and stipulations promulgated pursuant to this title.

(b) RESPONSIBILITIES OF HOLDERS OF LEASE.—It shall be the responsibility of any holder of a lease under this title to—

(1) maintain all operations within such lease area in compliance with regulations intended to protect persons and property on, and fish and wildlife, their habitat, and the environment of, the Coastal Plain; and

(2) allow prompt access at the site of any operations subject to regulation under this title to any ap-

propriate Federal or State inspector, and to provide such documents and records which are pertinent to occupational or public health, safety, or environmental protection, as may be requested.

(c) ON-SITE INSPECTION OF FACILITIES.—The Secretary shall promulgate regulations to provide for—

(1) scheduled onsite inspection by the Secretary, at least twice a year, of each facility on the Coastal Plain which is subject to any environmental or safety regulation promulgated pursuant to this title or such provisions contained in any lease issued pursuant to this title to assure compliance with such environmental or safety regulations; and

(2) periodic onsite inspection by the Secretary at least once a year without advance notice to the operator of such facility to assure compliance with all environmental or safety regulations.

SEC. 9408. FUNDING FOR ENVIRONMENTAL MONITORING AND ENFORCEMENT.—The Congress authorizes and directs that the Secretary of the Treasury shall make available to the Administrator of the Environmental Protection Agency (Administrator) an amount of $5,000,000, not later than sixty days after the first lease sale pursuant to section 9304 and annually thereafter, until ten years after oil and gas exploration, production and development activities on the

Coastal Plain have ceased. The Administrator shall distribute annually to the State of Alaska not less than 25 per centum of such amount. These moneys shall be used for activities, or in support of activities, within the State of Alaska by the Environmental Protection Agency and the State of Alaska for monitoring compliance with, and enforcing, all Federal environmental laws within their jurisdiction applicable to oil and gas exploration, development and production under this title, and monitoring compliance with, and enforcing, all such laws, with respect to owners, operators, and other persons having business in connection with leases granted pursuant to this title. For purposes of this section, all such Federal environmental laws shall include, but are not limited to, the Clean Air Act (42 U.S.C. 7401–7642), the Solid Waste Disposal Act (42 U.S.C. 6901–6987); the Federal Water Pollution Control Act (33 U.S.C. 1251–1376); the Comprehensive Environmental Response, Compensation, and Liability Act (26 U.S.C. 4611 et. seq. and 42 U.S.C. 9601–9675); and the Safe Drinking Water Act (42 U.S.C. 300f–300j–9). The Administrator and the State of Alaska shall enter into a cooperative agreement to coordinate their responsibilities under this section. The Administrator shall consult with the United States Department of Transportation and the State of Alaska on the appropriate role of the State of Alaska in monitoring and enforcing the Hazardous Materials Transportation Act

(49 App. U.S.C. 1801-1814). The Administrator shall submit annually a report to the Congress on the amount of funds expended and activities carried out pursuant to this section.

Subtitle E—Land Reclamation and Reclamation Liability Fund

SEC. 9501. LAND RECLAMATION.—The holder of a lease or leases on lands within the Coastal Plain shall be fully responsible and liable for the reclamation of lands within the Coastal Plain and any other Federal lands adversely affected in connection with exploration, development, or transportation activities on a lease within the Coastal Plain. The holder of a lease shall also be responsible for conducting any land reclamation required as a result of activities conducted on the lease by any of the leaseholder's subcontractors or agents. The holder of a lease may not delegate or convey, by contract or otherwise, this responsibility and liability to another party without the express written approval of the Secretary.

SEC. 9502. STANDARD TO GOVERN LAND RECLAMATION.—The standard to govern the reclamation of lands required to be reclaimed under this title, following their temporary disturbance or upon the conclusion of their use or prolonged commercial production of oil and gas and related activities, shall be reclamation and restoration to a condition capable of supporting the uses which the lands were capable of supporting prior to any exploration, development, or production activities, or upon application by the lessee, to a higher or better use as approved by the Secretary; except that in the case of roads, drill pads and other gravel foundation structures, reclamation and restoration shall be to a condition as closely approximating the original condition of such lands as is feasible using the best commercially available technology. Reclamation of lands shall be conducted in a manner that will not itself impair or cause significant adverse effects on fish or wildlife, their habitat, or the environment.

SEC. 9503. COASTAL PLAIN LIABILITY AND RECLAMATION FUND.—(a) Within six months of a commercial discovery within the Coastal Plain, the Coastal Plain Liability and Reclamation Fund (the "Reclamation Fund") is hereby directed to be established by the Secretary.

(b) The Secretary shall collect from the owner of any commercially produced crude oil or natural gas liquids from the Coastal Plain at the time and point where such crude oil first enters the trans-Alaska pipeline a fee of 5 cents per barrel. The collection of the fee shall cease when $50,000,000 has been accumulated in the Reclamation Fund, and it shall be resumed at any time that the accumulation of revenue in the Reclamation Fund falls below $45,000,000.

(c) All revenues collected under subsection (b) shall be paid into the Reclamation Fund. The reasonable costs of administration of the Reclamation Fund shall be paid from the revenues in the Reclamation Fund. All sums not needed for administration of the Reclamation Fund or making authorized payments out of the Fund shall be invested prudently by the Secretary in income-producing securities. Income from such securities shall be added to the principal of the Reclamation Fund.

(d) The revenues in the Reclamation Fund shall be available, with the approval of the Secretary, for the following purposes—

(1) to compensate promptly any person or entity, public or private, for any damages caused by oil and gas exploration, development and production activities on or in the vicinity of the Coastal Plain;

(2) to reclaim any area of the Coastal Plain not reclaimed in accordance with the standard set forth in section 9502 of this title, by the operator or the holder of a lease or leases;

(3) up to $15,000,000 annually to reclaim and restore—

(A) any area of the Arctic National Wildlife Refuge or other North Slope Federal lands affected by past and future oil and gas exploration, development, or production; and

(B) North Slope non-Federal lands affected by future exploration, development, or production on the Coastal Plain,

which are not reclaimed and restored in accordance with applicable Federal and State law;

(4) up to $2,000,000 annually to the Director of the Fish and Wildlife Service to monitor and conduct research on fish and wildlife species which utilize the land and water resources of the Coastal Plain; and

(5) to reclaim at the conclusion of the period of exploration, development and production, any area of the Coastal Plain and related lands which have not been properly reclaimed by the operator or lease holder.

(e) The United States shall have legal recourse against any party or entity who is responsible for the reclamation of any area within the Coastal Plain, to recover any funds expended under paragraphs (1), (2), (3) and (5) of this subsection due to a failure by the responsible party to reclaim such area as required by this Act: *Provided*, That such right of recovery shall not be available against any Alaska Natives conducting traditional subsistence use activities. Any funds so recovered shall be deposited in the Reclamation Fund.

(f) Any moneys remaining in the Reclamation Fund fifty years after the period of active oil and gas exploration, development, production and reclamation has been concluded in the Coastal Plain shall be paid into the general fund of the United States Treasury.

Subtitle F—Disposition of Oil and Gas Revenues

SEC. 9601. DISTRIBUTION OF REVENUES.—Notwithstanding any other provision of law, all revenues received from competitive bids, sales, bonuses, royalties, rents, fees, interest charges or other income derived from the leasing of oil and gas resources within the Arctic National Wildlife Refuge, Alaska shall be distributed as follows—

(a) 50 per centum to the State of Alaska; and

(b) 50 per centum to the United States.

SEC. 9602. ENERGY SECURITY FUND.—(a) Revenues distributed to the United States pursuant to subsection 9601(b) shall be deposited into a special account in the Treasury which shall be known as the Energy Security Fund. Revenues may be expended from the Energy Security Fund solely as provided in this section.

(b)(1) Not later than thirty days after the date of enactment of this title, the Secretary of Energy shall initiate a process to identify and prepare a list, in descending order of priority, of energy-related projects or programs to enhance this nation's energy security and reduce dependence on imported oil (hereinafter in this subtitle referred to as "the list"). In preparing the list, the Secretary of Energy shall consult with such governmental or non-governmental entities or individuals as the Secretary deems necessary.

(2) Following notice and comment, the initial list shall be transmitted to the Congress as part of the first budget submitted by the President following the initial deposit of funds in the Energy Security Fund.

(3) Thereafter, annual revisions of the list shall be prepared and transmitted in accordance with paragraph 2.

(c) The list shall consist of specific projects or programs (including an estimate of the costs thereof) identified by the Secretary of Energy relating to: energy efficiency and conservation; energy efficiency in transportation; energy research, development, demonstration, and commercialization; fossil energy, including clean coal technology and oil and gas extraction; electrical energy transmission and generation; advanced nuclear reactor programs pursuant to title XII of this Act; and renewable energy resources, such as solar, geothermal, and hydroelectric power.

(d) In identifying projects or programs for inclusion on the list, the Secretary of Energy shall give special consideration to those which (A) minimize or reduce reliance on imported oil; (B) reduce energy costs to consumers; (C) enhance reliability of energy supplies and national security; (D) foster the commercialization of new energy technologies; (E) increase the efficient use of nonrenewable resources such as coal, natural gas, and oil; (F) have the least potential social costs and adverse impacts on the environment; and (G) enhance the diversification of the Nation's domestic energy supply.

(e) The Secretary of the Treasury shall notify the Congress and the Secretary of Energy on an annual basis as to the amounts available for allocation from the Energy Security Fund.

(f) Unless the list is subsequently modified by law, the Secretary of the Treasury is authorized and directed, without further appropriation, beginning one year after the list is transmitted to the Congress pursuant to paragraph (c)(1), to make funds from the Energy Security Fund directly available to the Secretary of Energy to be used to fund those projects or programs on the list in an amount and in the manner and sequence provided therein.

SEC. 9603. JUDICIAL REVIEW AND NON-SEVERABILITY.—(a) Notwithstanding the provisions of section 9316 of this title, any legal action, including an action for declaratory judgment, to challenge the determination made in section 9601(a) of this title of the State of Alaska's share of oil and gas revenues shall be assigned for hearing and completed at the earliest possible date, shall, to the greatest extent practicable, take precedence over all other matters pending on the docket of the court at that time, and shall be expedited in every way by such court. Any such action shall be brought within ninety days of enactment of this title in an appropriate United States District Court. Such action shall be barred unless a complaint is filed within the time specified. Any review of an interlocutory or final judgment, decree, or order of the United States District Court in such action may be had only upon direct appeal to the Supreme Court of the United States.

(b) Nothing in this section shall be construed to grant causes of action to any person or to waive any defenses which may be available to the United States.

(c) If any action is brought in accordance with subsection (a), no lease sale shall occur under section 9304 of this title until a final nonappealable decision has been issued in any such action.

(d) If the revenue sharing provision of section 9601(a) of this title is held invalid, the remainder of this title shall be void.

Subtitle G—Export Restrictions

SEC. 9701. CRUDE OIL EXPORT RESTRICTIONS.—(a) Notwithstanding any other provision of law, no crude oil produced from lands in the Coastal Plain (except any such crude oil which (1) is exported to an adjacent foreign country to be refined and consumed therein in exchange for the same quantity of crude oil being exported from that country to the

United States; such exchange must result through convenience or increased efficiency of transportation in lower prices for consumers of petroleum products in the United States as described in subsection (b)(1)(B) of this section, (2) is temporarily exported for convenience or increased efficiency of transportation across parts of an adjacent foreign country and reenters the United States, or (3) is transported to Canada, to be consumed therein, in amounts not to exceed an annual average of fifty thousand barrels per day, in addition to exports under paragraphs (1) and (2), except that any ocean transportation of such oil shall be by vessels documented under section 12106 of title 46, United States Code) may be exported from the United States, or any of its territories and possessions, subject to subsection (b) of this section.

(b) Crude oil subject to the prohibition contained in subsection (a) may be exported only if—

(1) the President so recommends to the Congress after making and publishing express findings that exports of such crude oil, including exchanges—

(A) will not diminish the total quantity or quality of petroleum refined within, stored within, or legally committed to be transported to and sold within the United States;

(B) will, within three months following the initiation of such exports or exchanges, result in

(I) acquisition costs to the refiners which purchase the imported crude oil being lower than the acquisition costs such refiners would have to pay for the domestically produced oil in the absence of such an export or exchange, and (II) not less than 75 per centum of such savings in costs being reflected in wholesale and retail prices of products refined from such imported crude oil;

(C) will be made only pursuant to contracts which may be terminated if the crude oil supplies of the United States are interrupted, threatened, or diminished;

(D) are clearly necessary to protect the national interest; and

(E) are in accordance with the provisions of the Export Administration Act of 1979 (50 U.S.C. App. 2401 and following); and

(2) the President includes such findings in his recommendation to the Congress and the Congress, within sixty days after receiving that recommendation, agrees to a joint resolution which approves such exports on the basis of those findings, and which is thereafter enacted into law.

(c) Notwithstanding any other provision of this section or any other provision of law, the President may export oil produced from lands in the Coastal Plain to any country pursuant to a bilateral international oil supply agreement entered into by the United States with such nation before June 25, 1979, or to meet obligations of the United States under the International Energy Program in accordance with voluntary agreements or plans of action under section 252 of the Energy Policy and Conservation Act.

TITLE X—NATURAL GAS

SEC. 10001. OPTIONAL PROCEDURES FOR THE CONSTRUCTION OF NATURAL GAS FACILITIES.

(a) DEFINITIONS.—For the purposes of this section the term—

(1) "Commission" means the Federal Energy Regulatory Commission;

(2) "transportation service" means the transportation in interstate commerce of natural gas by a natural-gas company for itself or any other person;

(3) "rate schedule" means a statement of a rate or charge for a particular classification of transportation in interstate commerce of natural gas, and all terms, conditions, classifications, practices, rules and regulations affecting such rate or charge.

(4) "rate" means a rate or charge demanded or received for a particular classification of transportation in interstate commerce of natural gas, and all terms,

conditions, classifications, practices, rules and regulations affecting such rate or charge.

(b) CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY.—

(1) CONSTRUCTION.—For the purposes of section 7 of the Natural Gas Act, a certificate of public convenience and necessity is not required for the construction of a facility to provide transportation service: *Provided*, That the construction of such facility commences after the date of enactment of the National Energy Security Act of 1991.

(2) OPERATION.—Upon the initiation of transportation service rendered by a facility constructed pursuant to paragraph (1), the Commission, pursuant to its authority under section 7 of the Natural Gas Act, shall immediately issue a certificate of public convenience and necessity for such transportation service. The natural-gas company shall accept the certificate. The certificate shall include such reasonable terms and conditions as the public convenience and necessity may require.

(c) RATE SCHEDULES; BOOKS, ACCOUNTS AND RECORDS, AND RATE REVISIONS.—

(1) RATE SCHEDULES.—

(i) Prior to initiating transportation service utilizing a facility constructed pursuant to paragraph (b)(1), the natural-gas company shall file with the Commission the rate schedule for such facility.

(ii) The natural-gas company shall keep in convenient form and place and make open for public inspection the rate schedule for such facility.

(iii) An agreement between the natural-gas company and a person, including itself, who contracts for transportation service to be rendered utilizing such facility, may constitute a rate schedule: *Provided*, That such agreement is inclusive of all data and information required to be set forth in a rate schedule.

(iv) The rate for a facility constructed pursuant to paragraph (b)(1) shall be established on a stand-alone and incremental basis.

(2) BOOKS, ACCOUNTS AND RECORDS.—A natural-gas company that constructs a facility pursuant to paragraph (b)(1) shall maintain a separate system of books, accounts and records for such facility.

(3) RATE REVISIONS.—

(i) Upon its own motion or upon a complaint by any person, the Commission shall review the rate for a facility constructed pursuant to paragraph (b)(1) to ascertain whether there is a reasonable basis to conclude that such rate may be unjust, unreasonable, unduly discriminatory or preferential within the meaning of the Natural Gas Act.

(ii) If, as a result of such review, the Commission determines that there is a reasonable basis to conclude that such rate may be unjust, unreasonable, unduly discriminatory or preferential, pursuant to its authority under section 5 of the Natural Gas Act the Commission shall initiate a proceeding to determine if the rate is unjust, unreasonable, unduly discriminatory or preferential within the meaning of the Natural Gas Act.

(iii) If, as a result of the proceeding initiated under section 5 of the Natural Gas Act, the Commission finds that such rate is unjust, unreasonable, unduly discriminatory or preferential within the meaning of the Natural Gas Act, pursuant to its authority under section 5 of the Natural Gas Act the Commission shall determine the just and reasonable rate, charge, classification rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order.

(d) RATE BASE TREATMENT.—A natural-gas company may not, for ten years subsequent to the date on which a facility constructed pursuant to paragraph (b)(1) was placed into service, allocate the costs incurred for the construction, operation or maintenance of such facility to any other service rendered by such company.

(e) OTHER LAWS.—Except as expressly provided in this section, facilities constructed under authority of paragraph (b)(1) shall be subject to all applicable federal and state laws.

SEC. 10002. TRANSPORTATION OF NATURAL GAS UNDER THE NGPA.

Section 311 of the Natural Gas Policy Act of 1978 (15 U.S.C. 3371) is amended by—

(a) striking "AUTHORIZATION OF CERTAIN SALES AND TRANSPORTATION" and inserting in lieu thereof "AUTHORIZATION OF CERTAIN SALES, TRANSPORTATION AND CONSTRUCTION";

(b) striking "Commission Approval of Transportation" and inserting in lieu thereof "Commission Approval of Transportation and Construction"; and by

(c) striking paragraph 311(a)(1), and inserting in lieu thereof the following:

"(1) INTERSTATE PIPELINES.—

"(A) TRANSPORTATION.—The Commission may, by rule or order, authorize any interstate pipeline to transport natural gas on behalf of any other person.

"(B) CONSTRUCTION.—The Commission may, by rule or order, authorize the construction of facilities to transport natural gas in interstate commerce pursuant to subparagraph (A).

"(C) JUST AND REASONABLE RATES.—The rates and charges of any interstate pipeline with respect to any transportation authorized under subparagraph (A) shall be just and reasonable (within the meaning of the Natural Gas Act).

"(D) NON-DISCRIMINATORY TRANSPORTATION.—Any transportation authorized under subparagraph (A) shall not be unjust, unreasonable, unduly discriminatory or preferential (within the meaning of the Natural Gas Act).".

SEC. 10003. NEPA COMPLIANCE.

(a) LEAD AGENCY.—In cases where Federal Energy Regulatory Commission authorization of the construction or operation of facilities or projects under the Natural Gas Act or the Federal Power Act may be deemed a major Federal action under the National Environmental Policy Act or requires the preparation of other environmental documents, the Commission shall be the lead agency and shall have primary authority for compliance with section 2 and title I of the National Environmental Policy Act. The Commission may set reasonable time limits for consultation with other Federal agencies which participate in the review of a proposed facility or project pursuant to the National Environmental Policy Act to complete their review of any potential environmental impacts of the construction or operation of such facility or project, and for such other agencies to consult and submit comments to the Commission.

(b) ENVIRONMENTAL DOCUMENTS.—Where environmental documents are prepared in connection with applications for authority to construct or operate facilities or projects under the Natural Gas Act or the Federal Power Act, the Federal Energy Regulatory Commission shall permit, at the election of the applicant, a contractor, consultant or other person funded by the applicant to prepare such environmental document. The contractor shall be chosen by the Commission in its sole discretion. The Commission shall establish procedures to assure that the contractor, consultant or other person has no financial or other potential conflict of interest in the outcome of the proceeding. Nothing herein shall affect the Commission's responsibility to comply with the National Environmental Policy Act.

SEC. 10004. RATES AND CHARGES.

(a) NOTICE OF CHANGES.—The first and third sentences of section 4(d) of the Natural Gas Act (17 U.S.C. 717c(d)) are amended by striking "thirty days' notice" and inserting in lieu thereof "sixty days' notice".

(b) REFUNDS OF OVERCHARGES.—The third and fourth sentences of section 4(e) of the Natural Gas Act (17 U.S.C. 717c(e)) are amended to read as follows: "Where changes in rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such changes, specifying by whom and in whose behalf such amounts were paid, and, upon completion of the hearing and decision, to order the natural-gas company to refund, with interest, the portion of such rates or charges by its decision found to be not justified. At any hearing involving a rate or charge sought to be changed, the burden of proof to show that the changed rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible.".

SEC. 10005. UTILIZATION OF RULEMAKING PROCEDURES.

The first sentence of section 403(c) of the Department of Energy Organization Act (42 U.S.C. 7173(c)) is amended to read as follows: "Any function described in section 402 of this Act which relates to the establishment of rates and charges under the Federal Power Act or to the establishment of rates and charges, the issuance of a certificate of public convenience and necessity, or the abandonment of facilities and services under the Natural Gas Act may be conducted by rulemaking procedures.".

SEC. 10006. REVIEW OF COMMISSION ORDERS.

(a) NATURAL GAS ACT AMENDMENTS.—

(1) REHEARING.—Section 19(a) of the Natural Gas Act (15 U.S.C. 717r(a)) is amended by striking "Unless the Commission acts upon the application for rehearing within thirty days after it is filed, such application may be deemed to have been denied." and inserting in lieu thereof "Unless the Commission issues a final order on the application for rehearing within sixty days after it is filed, such application shall be deemed denied: Provided, That the Commission may, for extraordinary cause, extend the period for rehearing an additional sixty days.".

(2) COURT REVIEW.—Section 19(b) of the Natural Gas Act (15 U.S.C. 717r(b)) is amended by striking the first through third sentences and inserting the following in lieu thereof: "Any party to a proceeding under this Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within thirty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. The petition shall set forth specifically the ground or grounds upon which such petition is based. A copy of such petition shall forthwith be transmitted by the clerk of the court to the chairman of the Commission and thereupon the Commission shall file with the court the record upon which the order complained of was entered, as provided in section 2112 of title 28, United States Code.".

(b) NATURAL GAS POLICY ACT AMENDMENTS.—

(1) REHEARING.—Section 506(a)(2) of the Natural Gas Policy Act of 1978 (15 U.S.C. 3416(a)(2)) is

amended by striking "Unless the Commission acts upon such application for rehearing within thirty days after it is filed, such application shall be deemed to have been denied." and inserting in lieu thereof "Unless the Commission issues a final order on the application for rehearing within sixty days after it is filed, such application shall be deemed denied: *Provided*, That the Commission may, for extraordinary cause, extend the period for rehearing an additional sixty days.".

(2) COURT REVIEW.—Section 506(a)(4) of the Natural Gas Policy Act (15 U.S.C. 3416(a)(4)) is amended by striking the first through third sentences and inserting the following in lieu thereof: "Any person who is a party to a proceeding under this Act aggrieved by any final order issued by the Commission in such proceeding may obtain review of such order in the United States Court of Appeals for any circuit in which the party to which such order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia circuit. Review shall be obtained by filing a written petition, requesting that such order be modified or set aside in whole or in part, in such Court of Appeals within thirty days after the final action of the Commis-

sion on the application for rehearing required under paragraph (2). The petition shall set forth specifically the ground or grounds upon which such petition is based. A copy of such petition shall forthwith be transmitted by the clerk of the court to the chairman of the Commission and thereupon the Commission shall file with the court the record upon which the order complained of was entered, as provided in section 2112 of title 28, United States Code.".

SEC. 10007. LIMITED ANTITRUST RELIEF FOR INDEPENDENT GAS PRODUCER COOPERATIVES.

(a) DEFINITIONS.—For the purposes of this section, the term—

(1) "antitrust laws" shall mean the Federal laws defined in section 2(37) of the Natural Gas Policy Act of 1978;

(2) "independent producer" means any person whose natural gas production does not exceed six million cubic feet per day: *Provided*, That any person who is an interstate pipeline, intrastate pipeline or local distribution company, as defined in sections 2(15), (16), and (17) of the Natural Gas Policy Act of 1978, or who is an affiliate of such person, as defined in section 2(27) of the Natural Gas Policy Act of 1978, may not

be considered an independent producer for the purposes of this section;

(3) "independent producer cooperative" shall mean any group of independent producers formed and operated for the purpose of pooling natural gas to enable the cooperative members to bargain effectively for the sale of the natural gas to any person: *Provided*, That such group is not formed or operated for the purpose of raising prices.

(b) LIMITED ANTITRUST RELIEF.—

(1) In any civil action under the antitrust laws, the formation or operation of an independent producer cooperative shall not be deemed illegal per se, but shall be illegal only if the anticompetitive effects substantially outweigh the procompetitive effects.

(2) Nothing in this section shall affect the ability of the United States, any State or a private party from obtaining an injunction against an independent producer cooperative for conduct that is proven to be illegal under the standard set forth in paragraph (1).

SEC. 10008. VEHICULAR NATURAL GAS JURISDICTION.

(a) DEFINITIONS.—For the purposes of this section—

(1) the term "VNG" means natural gas for ultimate use as a fuel in a motor vehicle, and includes compressed natural gas.

(2) the term "Motor Vehicle" includes any automobile, truck, bus, van, or other on-road or off-road motor vehicle, including a boat.

(b) PERSONS WITH HINSHAW EXEMPTIONS.—

(1) PLACE OF ULTIMATE CONSUMPTION.—For purposes of section 1(c) of the Natural Gas Act, in the case of any sale of VNG, such VNG shall be deemed to be "ultimately consumed" within the State in which physical delivery of such VNG occurs, whether or not physical combustion of such VNG occurs in another State.

(2) STATE REGULATION.—For purposes of section 1(c) of the Natural Gas Act, certification from a State commission to the Federal Energy Regulatory Commission that such State commission has regulatory jurisdiction over the rates, services and facilities of a person (who receives natural gas from another person within or at the boundary of a State all of which natural gas so received is ultimately consumed within such State) and is exercising such jurisdiction shall constitute conclusive evidence of such regulatory power or jurisdiction even in cases where such State commission does not have jurisdiction by reason of State law, or is not exercising jurisdiction, over the sale for resale or transportation of VNG.

(c) Persons with Service Area Determinations.—For purposes of the Natural Gas Act—

(1) Sale for resale.—In the case of a sale for resale of VNG by the holder of a service area determination under section 7(f) of the Natural Gas Act, such sale for resale shall be subject to the exclusive jurisdiction of the State commission in the State in which physical delivery of such VNG occurs, whether or not physical combustion of such VNG occurs in another State.

(2) Transportation.—In the case of transportation of VNG by the holder of a service area determination under section 7(f) of the Natural Gas Act, such VNG shall for purposes of section 7(f)(2) of the Natural Gas Act be deemed to be "consumed" within the State in which physical delivery of such VNG occurs, whether or not physical combustion of such VNG occurs in another State.

(3) State regulation.—In case of a sale for resale of VNG, or the transportation of VNG, by a holder of a service area determination under section 7(f) of the Natural Gas Act, such sale for resale or transportation shall be deemed to be subject to the exclusive jurisdiction of the State commission of the State in which such sale for resale or transportation occurs

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whether or not the sale for resale or transportation of VNG is subject to the jurisdiction of the State commission under State law.

TITLE XI—TRANSPORTATION AND ALTERNATIVE FUELS

Subtitle A—Corporate Average Fuel Economy

SECTION 11001. SHORT TITLE.

This subtitle may be cited as the "Motor Vehicle Fuel Efficiency Act of 1991".

SEC. 11002. DEFINITIONS.

Section 501 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2001) is amended by adding at the end the following new paragraphs:

"(15) The term 'light truck' means an automobile other than a passenger automobile.

"(16) The term 'vehicle class' means (i) all passenger automobiles; (ii) all light trucks; or (iii) a class of light trucks as determined by the Secretary of Transportation under section 502(b)(4).".

SEC. 11003. AVERAGE FUEL ECONOMY STANDARDS FOR PASSENGER AUTOMOBILES.

Section 502(a) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(a)) is amended by striking subsection (a) and inserting the following:

"(a)(1) Except as otherwise provided in subsection (c), the average fuel economy for passenger automobiles manufactured by any manufacturer in any model year after model year 1984 shall not be less than the number of miles per gallon established for such model year under the following table:

"Model year	"Average fuel economy standard
"1985 through 1995	27.5 miles per gallon
"1996 through 2001	Determined by the Secretary under paragraph (2)(A)
"2002 and thereafter	Determined by the Secretary under paragraph (2)(B)

"(2) Not later than July 1, 1992, the Secretary shall prescribe, by rule, for each manufacturer of passenger automobiles, average fuel economy standards for—

"(A) passenger automobiles manufactured by such manufacturer in model years 1996 through 2001; and

"(B) passenger automobiles manufactured by such manufacturer in model years 2002 and thereafter.

"(3) The average fuel economy standard prescribed by the Secretary for any manufacturer under paragraph (2)(A) or (B) shall be set at a level which the Secretary determines is the maximum feasible average fuel economy level for such manufacturer as determined under subsection (d).".

SEC. 11004. AVERAGE FUEL ECONOMY STANDARDS FOR LIGHT TRUCKS.

Section 502 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002) is amended further by striking subsection (b) and inserting the following:

"(b)(1) The Secretary shall, by rule, prescribe average fuel economy standards for light trucks which are manufactured by any manufacturer in each model year before model year 1996. Such standards shall be set at a level which the Secretary determines is the maximum feasible average fuel economy level which such manufacturers are able to achieve in each model year to which this subsection applies. Any standard applicable to a model year under this subsection shall be prescribed at least 18 months prior to the beginning of such model year.

"(2) Not later than July 1, 1992, the Secretary shall prescribe, by rule, for each manufacturer of light trucks, average fuel economy standards for—

"(A) light trucks manufactured by such manufacturer in model years 1996 through 2001; and

"(B) light trucks manufactured by such manufacturer in model years 2002 and thereafter.

"(3) The average fuel economy standard prescribed by the Secretary for any manufacturer under paragraph (2)(A) or (B) shall be set at a level which the Secretary determines is the maximum feasible average fuel economy level for such manufacturer as determined under subsection (d).

"(4) Any rule prescribed by the Secretary under this subsection may provide for separate standards for different classes of light trucks (as determined by the Secretary).".

SEC. 11005. EXEMPTIONS FOR MANUFACTURERS OF LIMITED NUMBERS OF PASSENGER AUTOMOBILES.

Section 502(c)(1) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(c)(1)) is amended by inserting "for any model year prior to model year 1996" immediately before the period at the end of the first sentence.

SEC. 11006. CALCULATION OF AVERAGE FUEL ECONOMY STANDARDS FOR INDIVIDUAL MANUFACTURERS.

Section 502 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002) is amended further by striking subsection (d) and inserting the following:

"(d)(1) The Secretary shall determine the maximum feasible average fuel economy achievable for passenger automobiles, light trucks, or class of light trucks manufactured by any manufacturer (i) during model year 1996 through 2001 and (ii) during model year 2002 and thereafter by—

"(A) determining, in accordance with subsection (e)(2), the maximum feasible average fuel economy (in miles per gallon) of all automobiles of such vehicle class manufactured by all manufacturers during such period;

"(B) calculating the percentage increase in the average fuel economy of all automobiles of such vehicle class that the maximum feasible average fuel economy determined in paragraph (1) represents compared to the average fuel economy of all automobiles of such vehicle class manufactured in model year 1990 as determined in accordance with section 503; and

"(C) increasing the average fuel economy of automobiles of such vehicle class manufactured by such manufacturer in model year 1990 by the percentage increase calculated in accordance with paragraph (2).

"(2) The Secretary may apply different percentage increases to different vehicle classes, but shall apply the same percentage increase calculated under paragraph (1)(B) to all manufacturers of automobiles of such vehicle class.".

SEC. 11007. DETERMINATION OF MAXIMUM FEASIBLE AVERAGE FUEL ECONOMY.

Section 502 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002) is amended further by striking subsection (e) and inserting the following:

"(e)(1) For purposes of subsections (a)(1), (b)(1), and (c), in determining maximum feasible average fuel economy, the Secretary shall consider—

"(A) technological feasibility;

"(B) economic practicability;

"(C) the effect of other Federal motor vehicle standards on fuel economy; and

"(D) the need of the Nation to conserve energy.

"(2) For purposes of subsections (a)(2) and (3), (b)(2) and (3), and (d), in determining the maximum feasible average fuel economy of all passenger automobiles, light trucks, or a class of light trucks, as the case may be, manufactured by all manufacturers during (i) model years 1996 through 2001 or (ii) model year 2002 and thereafter, the Secretary shall assume that, taken as a whole, the population of automobiles of such vehicle class manufactured by all manufacturers during such model year—

"(A) uses all fuel-saving technologies and designs that are capable of being commercialized by the appropriate period, considering—

"(i) the time at which improved or new technologies and designs could be introduced and the rates at which they might penetrate the market under existing industrial capabilities; and

"(ii) any technical, financial, regulatory, organizational, and marketing limitations to deploying improved or new technologies by such period;

"(B)(i) with respect to passenger automobiles, attains the same performance level (measured by the product of torque and axle ratio divided by curb weight) as passenger automobiles manufactured in model year 1990, taken as a whole; and

"(ii) with respect to light trucks or class thereof, attains performance levels and utility comparable to such class manufactured in model year 1990;

"(C) reflects the same size mix and interior volume as automobiles of such model type manufactured in model year 1990, taken as a whole;

"(D) meets all applicable emission standards; and

"(E) meets all applicable automobile safety standards.".

SEC. 11008. AMENDMENT OF STANDARDS.

Section 502(f) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(f)) is amended—

(1) by striking "subsection (a)(3)" and inserting "subsection (a)(2)" each place it appears; and

(2) by striking "if required by paragraph (4) of subsection (a)," in paragraph (2)(B).

SEC. 11009. PROCEEDINGS.

Section 502(h) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(h)) is amended by striking "Proceedings under subsection (a)(4) or (d)" and inserting

"Any proceeding to promulgate or amend a rule under this section".

SEC. 11010. CREDIT TRADING.

(a) CARRYING FORWARD CREDITS.—Section 502(l)(1)(B)(ii) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(l)(1)(B)(ii)) is amended to read as follows:

"(ii) to the extent that such credit is not so taken into account pursuant to clause (i), shall be available to be taken into account with respect to the average fuel economy of that manufacturer—

"(I) for any three consecutive model years immediately following the model year in which such manufacturer exceeds such applicable average fuel economy standard with respect to credits earned for exceeding average fuel economy standards for model years prior to 1996; and

"(II) until used with respect to credits earned for exceeding average fuel economy standards for model years 1996 and thereafter.".

(b)(1) TRANSFERRING CREDITS.—Section 502(l) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(1)) is amended by striking paragraph (3) and inserting the following:

"(3) Credits under this subsection may be transferred among manufacturers and among vehicle classes of a manufacturer in accordance with rules issued by the Secretary under paragraph (4)."; and

(2) redesignating paragraph (4) as paragraph (4)(A) and inserting at the end the following new subparagraph:

"(B) Not later than twenty-four months after the date of enactment of the Motor Vehicle Fuel Efficiency Act of 1991, the Secretary shall issue rules implementing the credit trading system authorized by paragraph (4).".

(c) CONFORMING AMENDMENTS.—Section 502(l) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(l)) is amended further—

(1) by striking "automobiles which are not passenger automobiles" and inserting "light trucks" in paragraph (2); and

(2) by striking "class of automobiles" and inserting "light trucks" in paragraph (2).

SEC. 11011. CALCULATION OF FUEL ECONOMY FOR LIGHT TRUCKS.

Section 503(a)(2) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2003(a)(2)) is amended by adding before the period the following: "that are based upon the method required by this section for calculation of average fuel economy of passenger automobiles".

SEC. 11012. AIRBAG CREDIT FOR SMALL PASSENGER AUTOMOBILES.

(a) AIRBAG CREDIT.—Section 503(a) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2003(a)) is amended—

(1) in paragraph (1) by inserting ", subject to paragraph (4)," immediately before "be calculated"; and

(2) by adding at the end the following new paragraph:

"(4)(A) If a manufacturer manufactures small passenger automobiles which comply with Federal Motor Vehicle Safety Standard Number 208 by means of airbags for the driver seating position only or for both the driver and front seat outboard seating positions, average fuel economy for purposes of section 502(a) and (c) shall be calculated as provided under subsection (a)(1), except that in the calculation of the sum of terms under subsection (a)(1)(B) the term applicable to any model type of small passenger automobile for which there are automobiles so equipped with airbags shall be determined by adding—

"(i) the fraction that is created by dividing the number of small passenger automobiles of such model type that are equipped with airbags for the driver seating position only, by 105 per centum of the fuel economy measured for such model type,

"(ii) the fraction that is created by dividing the number of small passenger automobiles of such model type that are equipped with airbags for both the driver and outboard front seating positions, by 110 per centum of the fuel economy measured for such model type, and

"(iii) the fraction that is created by dividing the number of small passenger automobiles of such model type that are not so equipped, by the fuel economy measured for such model type.

"(B) For purposes of this paragraph, the term 'small passenger automobile' means a passenger automobile (i) with a wheel base of less than one hundred inches, or with a curb weight of two thousand seven hundred and fifty pounds or less, and (ii) whose measured fuel economy is at least thirty-five miles per gallon.".

(b) CONFORMING AMENDMENT.—Section 502(e) of the Motor Vehicle Information and Costs Savings Act (15 U.S.C. 2002(e)) as amended by section 11007 of this Act is amended further by adding at the end the following new paragraph:

"(3) In determining maximum feasible average fuel economy, the Secretary shall not consider the alternative calculation for airbag-equipped passenger automobiles under section 503(a)(4).".

SEC. 11013. EXPLANATORY BOOKLET DISTRIBUTED BY SECRETARY OF ENERGY.

(a) MINIMUM NUMBER OF COPIES DISTRIBUTED.—Paragraph (1) of section 506(b) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2006(b)) is amended by adding at the end the following new sentence: "During the twelve-month period beginning on the first day of the first month after the date of enactment of the Motor Vehicle Fuel Efficiency Act of 1991, the Secretary of Energy shall distribute no less than one hundred booklets each year to each dealer and shall distribute as many in addition to one hundred booklets as are reasonably requested by dealers from time to time.".

(b) TECHNICAL AMENDMENTS.—(1) Section 506(b)(1) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2006(b)(1)) is amended further by striking "Administrator of the Federal Energy Administration" and inserting "Secretary of Energy".

(2) Section 506(e) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2006(e)) is amended by striking "Federal Energy Administrator" and inserting "Secretary of Energy".

SEC. 11014. EXCESSIVE FUEL CONSUMPTION FEE.

The Motor Vehicle Information and Cost Savings Act is amended by striking section 507 (15 U.S.C. 2007) and inserting the following:

"EXCESSIVE FUEL CONSUMPTION FEE

"SEC. 507. (a) If the average fuel economy calculations reported by the EPA Administrator to the Secretary under section 503(d) indicate that the average fuel economy of any manufacturer does not meet the applicable average fuel economy standards established under section 502(a), (b), or (c), the Secretary shall assess the manufacturer an excessive fuel consumption fee in an amount determined under section 508.

"(b) The amount of the fee shall be assessed by the Secretary by written notice.

"(c)(1) Not later than 30 days after a determination by the Secretary under subsection (a) that a manufacturer has failed to meet any applicable average fuel economy standard under section 502, such manufacturer may apply to the Federal Trade Commission for a certification under this subsection. If the manufacturer shows and the Federal Trade Commission determines that reduction of the fee which the Secretary shall otherwise assess is necessary to prevent a substantial lessening of competition in that segment of the automobile industry subject to the standard with respect to which such fee is assessed, the Commission shall so certify. The certification shall specify the maximum amount that such fee may be reduced. To the maximum extent practicable, the Commission shall render a decision with respect to an application under this subsection not later than ninety days after the application is filed with the Commission. A proceeding under this subsection shall not have the effect of delaying the manufacturer's liability under this section for a fee for more than ninety days after such application is filed, but any payment made before a decision of the Commission under this subsection becomes final shall be paid to the court in which the fee is collected, and shall (except as otherwise provided in paragraph (2)) be held by such court, until 90 days after such decision becomes final (at which time it shall be paid into the general fund of the Treasury).

"(2) Whenever a fee has been assessed and collected from a manufacturer under this section, and is being held by a court in accordance with paragraph (1), and the Secretary subsequently determines to reduce such fee pursuant to section 508(c), the Secretary shall direct the court to remit the appropriate amount of the fee to such manufacturer.

"(d) Any manufacturer assessed a fee under this section may obtain review of a determination (i) of the Secretary to assess such fee or (ii) of the Federal Trade Commission under subsection (c) in the United States Court of Appeals for the District of Columbia Circuit, or for any circuit wherein the manufacturer resides or has his principal place of business.

Such review may be obtained by filing a notice of appeal in such court within 30 days after the date of such determination, and by simultaneously sending a copy of such notice by certified mail to the Secretary or the Federal Trade Commission, as the case may be. The Secretary or the Commission, as the case may be, shall promptly file in such court a certified copy of the record upon which such determination was made. Any such determination shall be reviewed in accordance with chapter 7 of title 5, United States Code.

"(2) If any manufacturer fails to pay a fee after it has become a final and unappealable order, or after the appropriate court of appeals has entered final judgment in favor of the Secretary, the Attorney General shall recover the amount for which the manufacturer is liable in any appropriate district court of the United States. In such action, the validity and appropriateness of the final order assessing the fee shall not be subject to review.

"(e) A claim of the United States for a fee assessed against a manufacturer under this section shall, in the case of the bankruptcy or insolvency of such manufacturer, be subordinate to any claim of a creditor of such manufacturer which arises from an extension of credit before the date on which the judgment in any collection action under this section becomes final (without regard to subsection (d)).".

SEC. 11015. AMOUNT OF THE EXCESSIVE FUEL CONSUMPTION FEE.

Subsections (a), (b), (c), and (d) of section 508 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2008(a)–(d)) are amended to read:

"AMOUNT OF THE EXCESSIVE FUEL CONSUMPTION FEE

"SEC. 508. (a)(1) The Secretary shall determine the amount of the excessive fuel consumption fee to be assessed under section 507 with respect to passenger automobiles manufactured in any model year by multiplying the base fee provided in subsection (b) by (i) the number of tenths of a mile per gallon by which the average fuel economy of the passenger automobiles manufactured by such manufacturer during such model year is exceeded by the applicable average fuel economy standard established under section 502 (a) or (c), multiplied by the number of passenger automobiles manufactured by such manufacturer during such model year, reduced (at the election of the manufacturer) by (ii) credits available under section 502(l) for such model year.

"(2) The Secretary shall determine the amount of the excessive fuel consumption fee to be assessed under section 507 with respect to light trucks manufactured in any model year by multiplying the base fee provided in subsection (b) by (i) the number of tenths of a mile per gallon by which the applicable average fuel economy standard exceeds the average fuel economy of the light trucks manufactured by such manufacturer during such model year, multiplied by the number of light trucks to which such standard applies manufactured by such manufacturer during such model year, reduced (at the election of the manufacturer) by (ii) credits available under section 502(l) for such model year.

"(b) For purposes of calculating the amount of any civil penalty under this section, the amount of the base fee shall be—

"For model years:

"Prior to 1993	$5.00
"1993	$10.00
"1996	$20.00
"1997 and thereafter	The amount of the fee applicable in the prior model year as adjusted in accordance with the annual implicit price deflator for the gross national product during such model year.

"(c) The Secretary shall have the discretion to reduce the amount of the fee calculated under this section only to the extent—

"(1) necessary to prevent the insolvency or bankruptcy of the manufacturer,

"(2) such manufacturer shows that its failure to meet the standards of section 502 resulted from an act of God, a strike, or a fire, or

"(3) the Federal Trade Commission has certified that reduction of such fee is necessary to prevent a substantial lessening of competition, as determined under section 507(c).

"(d)(1)(A) The Secretary shall, by rule in accordance with the provisions of this subsection and subsection (e), substitute a higher amount for the amount of the base fee which would be used to calculate the fee under subsection (a) in the absence of such rule, if the Secretary finds that—

"(i) the additional amount of the fee which may be imposed under such rule will result in, or substantially further, substantial energy conservation for automobiles in future model years for which such higher fee may be imposed; and

"(ii) subject to subparagraph (B), such additional amount of fee will not result in substantial deleterious impacts on the economy of the United States or any State or region of any State.

"(B) Any findings under subparagraph (A)(ii) may be made only if the Secretary finds that it is likely that—

"(i) such additional amount of fee will not cause a significant increase in unemployment in any State or region thereof;

"(ii) such additional amount will not adversely affect competition; and

"(iii) such additional amount will not cause a significant increase in automobile imports.

"(2) Any rule under paragraph (1) may not provide that the amount per tenth of a mile per gallon used to calculate the fee under subsection (a) be less than the base fee or more than twice the base fee provided by subsection (b).".

SEC. 11016. ESTABLISHMENT OF THE EXCESSIVE FUEL CONSUMPTION FUND.

Section 508 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2008) is amended further by adding at the end the following new subsection:

"(f)(1) There is hereby established in the Treasury of the United States a separate fund, to be known as the Excessive Fuel Consumption Fund. The Fund shall consist of all fees collected by the Secretary under this section.

"(2) Subject to appropriation, the Secretary of Energy may make expenditures from the Fund for purposes of—

"(A) providing financial assistance to the States in accordance with section 514; and

"(B) funding other energy conservation programs, to the extent that the amount available in the Fund exceeds the amount needed under subparagraph (A).

"(3) The Secretary of the Treasury shall hold the Fund and, after consulting with the Secretary of Transportation and the Secretary of Energy, shall report annually to the Congress on the financial condition and operations of the Fund during the preceding fiscal year. The budget of the Fund shall be included in the Budget of the United States Government.".

SEC. 11017. SCRAPPAGE OF OLDER VEHICLES.

The Motor Vehicle Information and Cost Savings Act is amended further by adding at the end thereof the following new section:

"SCRAPPAGE OF OLDER VEHICLES

"SEC. 514. (a) The Secretary of Energy shall provide financial assistance to State programs encouraging the voluntary removal from use and the marketplace pre-1980 model year automobiles.

"(b)(1) Within one hundred and eighty days after the enactment of the Motor Vehicle Fuel Efficiency Act of 1991, the Secretary of Energy, after consulting with the EPA Administrator, shall adopt rules necessary to review and approve State programs that qualify for financial assistance under subsection (a).

"(2) Any rules adopted by the Secretary of Energy under paragraph (1) shall require that to qualify for federal assistance under subsection (a) at least 50 per centum of the cost of the program be paid for from State or private funds.

"(c) The Secretary of Energy is authorized, subject to appropriation, to make expenditures from the Excessive Fuel Consumption Fund for purposes of this section.".

SEC. 11018. TECHNICAL AND CONFORMING AMENDMENTS.

(a) DESIGNATION OF THE EPA ADMINISTRATOR.—Section 502 (g)(1) of the Motor Vehicle Information and Cost

Savings Act (15 U.S.C. 2002(g)(1) is amended by striking "Environmental Protection Agency" and inserting "EPA".

(b) ELIMINATION OF THE SECRETARY'S ADJUSTMENT AUTHORITY.—Section 502(l)(1)(B) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(l)(1)(B)) is amended by striking "any adjustment under subsection (d) of this section".

(c) DESIGNATION OF THE ENERGY AND COMMERCE COMMITTEE.—Section 503(b)(3)(D)(ii)(II) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2003(b)(3)(D)(ii)(II)) is amended by striking "Interstate and Foreign Commerce" and inserting "Energy and Commerce".

(d) LEGISLATIVE VETO.—Section 504(a) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2004(a)) is amended by striking "(or in the case of an amendment submitted to each House of the Congress under section 502(a)(4), at any time prior to sixty days after the expiration of the sixty-day period specified in section 502(a)(5))".

Subtitle B—Alternative Fuels

SEC. 11101. MASS TRANSIT PROGRAM.—(a) COOPERATIVE AGREEMENTS AND JOINT VENTURES.—(1) The Secretary, in consultation with the Administrator of the Urban Mass Transit Administration, may, consistent with this Act and the Alternative Motor Fuels Act of 1988 (Public Law 100–494), enter into cooperative agreements and joint ventures proposed by municipal, county, or regional transit authority in an urban area with a population over one hundred thousand (according to latest available census information) to demonstrate the feasibility, including safety of specific vehicle design, of using natural gas or other alternative fuels for mass transit.

(2) The cooperative agreements and joint ventures under paragraph (1) may include interested or affected private firms willing to provide assistance in cash, or in kind, for any such demonstration.

(b) COST-SHARE.—(1) The Secretary may not enter into any cooperative agreement or joint venture under subsection (a) with any municipal, county or regional transit authority unless such government body agrees to provide at least 25 per centum of the costs of such demonstration.

(2) The Secretary, at his discretion, may grant such priority under this section to any entity that demonstrates that the use of natural gas or other alternative fuels used for transportation would have a significant effect on the ability of an air quality region to comply with applicable regulations governing ambient air quality.

(c) AUTHORIZATION.—There is authorized to be appropriated not more than $30,000,000 for each of fiscal years 1992, 1993, and 1994 to carry out the purposes of this section.

SEC. 11102. TRAINING PROGRAM.—(a) PROGRAM.—The Secretary of the Department of Labor shall establish and carry out a training and certification program for technicians who are responsible for vehicle installation of equipment that converts gasoline or diesel-fueled vehicles to the capability to run on natural gas or other alternative fuels alone, or on natural gas or other alternative fuels and either diesel fuel or gasoline, and for the maintenance of such converted vehicles. Such training and certification programs shall provide these technicians with instruction on the correct installation procedures and techniques, adherence to specifications, vehicle operating procedures, emissions testing, and other appropriate mechanical concerns applicable to these vehicle conversions.

(b) COOPERATIVE AGREEMENTS.—The Secretary may enter into cooperative agreements with, and provide financial assistance to, under this section, appropriate parties to provide training programs that will ensure the proper operation and performance of conversion equipment.

(c) CONSISTENCY.—The program under this section shall be consistent with the Alternative Motor Fuels Act of 1988 (Public Law 100–494).

(d) AUTHORIZATION.—There is authorized to be appropriated not more than $5,000,000 for each of the fiscal years 1992, 1993, and 1994 to carry out the purposes of this section.

Subtitle C—Electric Vehicle Technology Development and Demonstration

SEC. 11201. SHORT TITLE.—This subtitle may be cited as the "Electric Vehicle Technology Development and Demonstration Act of 1991".

SEC. 11202. DEFINITIONS.—For purposes of this subtitle, the term—

(1) "Administrator" means the Administrator of the Environmental Protection Agency;

(2) "conventionally fueled vehicle" means a vehicle powered by an internal combustion engine that utilizes gasoline or diesel fuel as its fuel source;

(3) "electric vehicle" means a vehicle powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, or other portable sources of electrical current, and that may include a nonelectrical source of power designed to charge batteries and components;

(4) "eligible nonattainment area" means a nonattainment area that the Secretary designates as an eligible nonattainment area under section 1134(b);

(5) "life cycle costs" means all costs associated with the purchase, operation, maintenance, and disposal of a vehicle; and

(6) "nonattainment area" means a nonattainment area identified by the Administrator pursuant to section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)).

SEC. 11203. IDENTIFICATION OF NONATTAINMENT AREAS.—(a) The Secretary, in consultation with the Administrator, shall identify, not later than thirty days after the date of the enactment of this Act, the nonattainment areas in the United States in which the use of conventionally fueled vehicles contributes significantly to that nonattainment and in which the use of electric vehicles could contribute to attainment of applicable National Ambient Air Quality Standards. The Secretary shall provide notification to those nonattainment areas so identified.

(b) The Secretary, after consultation with the Administrator and not later than thirty days after notification of the nonattainment areas identified under subsection (a), shall designate nonattainment areas eligible to participate in the program authorized by this subtitle.

SEC. 11204. APPLICATIONS FROM MANUFACTURERS.—(a) Not later than thirty days after the Secretary designated the eligible nonattainment areas under section 11203(b), the Secretary shall make an initial request for applications from manufacturers to develop, demonstrate, certify, manufacture, sell, warranty, and service electric vehicles in one or more eligible nonattainment areas. Additional requests for applications may be made if the Secretary determines that the responses to the initial request are inadequate.

(b) The request for applications shall require a manufacturer to identify the following:

(1) any eligible nonattainment area in which the electric vehicles will be sold;

(2) the quantity of vehicles that will be available for sale in each area;

(3) the dealership network or other means to be used by a manufacturer to distribute, market, and sell vehicles;

(4) the type of vehicle (which may include light to medium duty cargo or passenger vehicles);

(5) the specifications and performance characteristics of each vehicle;

(6) the maintenance and other support services that will be available to a purchaser;

(7) the selling price of a manufacturer for varying volumes of production of each type of vehicle;

(8) information regarding the life cycle costs, including projected costs of operating and maintaining an electric vehicle in comparison with operating and maintaining a conventionally fueled vehicle;

(9) the level of involvement (cost-sharing or otherwise), if any, that State or local government entities

will have in the manufacturer's proposal, and how that involvement will affect the level of Federal cost-sharing required; and

(10) other information that the Secretary deems necessary.

SEC. 11205. SELECTION OF MANUFACTURERS.—(a) After consulting with the Secretary of Commerce, the Secretary of Transportation, and the Administrator, and not later than one hundred eighty days after the initial request for applications is made under section 11204, the Secretary may select one or more manufacturers eligible to receive reimbursement payments for the development, demonstration, manufacture, and sale of electric vehicles.

(b) The Secretary shall select a manufacturer based upon the overall quality of the proposal, including the following:

(1) The ability of a manufacturer, directly or indirectly, to develop, demonstrate, manufacture, distribute, sell and service a significant number of electric vehicles;

(2) The commitment of the manufacturer to distribute, sell and service electric vehicles in various regions of the country.

(3) The suitability of the vehicles for use as a cargo or passenger vehicle;

(4) The quality of the vehicle with respect to safety and environmental considerations;

(5) The long-term technical viability of the vehicle, and the ability of the manufacturer to incorporate subsequent advancements, modifications, and technology;

(6) The ability and commitment of a manufacturer to reduce the life cycle costs of electric vehicles over a period of five years or less after selection to a level at least equal to comparable conventionally fueled vehicles;

(7) The selling price of a manufacturer for varying volumes of production of vehicles, the proposed discount (as defined in section 11206), and life cycle costs of the electric vehicles;

(8) The extent to which the involvement of State or local government in the program will permit the reduction of the Federal cost share per vehicle to be supported or will otherwise be used to leverage the Federal cost-sharing to be provided among a greater number of vehicles;

(9) Other criteria that the Secretary deems necessary.

SEC. 11206. DISCOUNTS TO PURCHASERS.—(a) A manufacturer selected by the Secretary shall offer a purchaser a discount equal to either:

(1) An amount which represents the excess of the estimated life cycle costs of the electric vehicle over the life cycle costs of a conventionally fueled vehicle of comparable type; or

(2) An amount by which the selling price of the electric vehicle exceeds the suggested retail price of a conventionally fueled vehicle of comparable type.

In no case shall the discount be greater than 50 per centum of the selling price by varying volumes of production.

(b) The Secretary, not later than thirty days after a manufacturer has provided notice in the form and manner specified by the Secretary of the sale of an electric vehicle, shall pay a manufacturer a payment not to exceed the discount for each electric vehicle sold.

(c) To be eligible for payment under subsection (b), a manufacturer shall certify to the Secretary the following:

(1) the discount to the purchaser does not lower the selling price of each electric vehicle below the suggested retail price of a conventionally fueled vehicle of comparable type;

(2) the actual selling price of the vehicle is equal to the selling price specified in the manufacturer's pro-

posal to the Secretary reduced by the full amount of the discount received, calculated as specified above, unless the Secretary agrees to a request by the manufacturer to adjust the selling price as specified in the contract to reflect higher costs actually incurred in production;

(3) the vehicle will be used primarily in the eligible nonattainment area in which the vehicle will be purchased;

(4) the purchaser has agreed to provide the manufacturer with information regarding operation, maintenance, and usability of the vehicle for five years after purchase; and

(5) the manufacturer will provide such information regarding the development, demonstration, manufacture, sale, and maintenance of electric vehicles that the Secretary requests for a period of five years, beginning in fiscal year 1992.

(d) The Secretary may enter into contracts with manufacturers of electric vehicles for purposes of carrying out this Act.

SEC. 11207. REPORTS TO CONGRESS.—The Secretary shall report to Congress in fiscal years 1992 and 1994 on the programs and projects supported under this subtitle and the progress being made toward accomplishing the goals of this subtitle.

SEC. 11208. AUTHORIZATION.—There is authorized to be appropriated for purposes of this subtitle $10,000,000 for each of the three fiscal years following the date of enactment of this Act.

TITLE XII—ADVANCED NUCLEAR REACTOR COMMERCIALIZATION

SEC. 12001. SHORT TITLE.

This title may be cited as the "Civilian Advanced Nuclear Reactor Commercialization Act of 1991.".

SEC. 12002. FINDINGS, PURPOSES, AND DEFINITIONS.

(a) FINDINGS.—Congress finds that—

(1) energy generated from nuclear fission now supplants the burning of fossil fuels in an economical fashion and contributes substantially to safe and reliable supplies of electricity while reducing the rate and scope of environmental pollution; and

(2) it is in the national interest for the Federal Government to provide leadership in encouraging advanced nuclear reactor technologies so that such technologies may be adopted as needed.

(b) PURPOSES.—The purposes of this title are to—

(1) require the Secretary to make decisions that will focus the Department's civilian nuclear programs

in a way that will lead toward commercialization of advanced nuclear reactor technologies;

(2) authorize the Secretary to encourage the use where needed of advanced nuclear reactor technologies; and

(3) ensure the timely availability of advanced nuclear reactor technologies, including technologies that exhibit passive safety features.

(c) DEFINITIONS.—For purposes of this title, the term—

(1) "advanced nuclear reactor technologies" includes, but is not limited to, advanced light water reactors; modular high-temperature, gas-cooled reactors; and liquid metal reactors, for the generation of commercial electric power from nuclear fission.

(2) "Commission" means the Nuclear Regulatory Commission;

(3) "Department" means the Department of Energy; and

(4) "Secretary" means the Secretary of Energy.

SEC. 12003. PROGRAM.

(a) The Secretary shall carry out a comprehensive program in accordance with the provisions of this title to encourage the deployment of advanced nuclear reactor technologies that to the maximum extent practicable—

(1) are cost-effective in comparison to alternative sources of commercial electric power of comparable availability and reliability; including consideration of the impact on the rate and scope of global climate change;

(2) utilize modular construction techniques;

(3) facilitate standardized design, construction, licensing, and operation;

(4) exhibit passive safety features; and

(5) incorporate features that advance the objectives of the Nuclear Nonproliferation Act by discouraging diversion of fissile material for use in nuclear weapons.

(b) CERTIFIED DESIGNS.—(1) The program of the Secretary under subsection (a) shall include appropriate steps for the development and submission for certification by the Commission of completed standard designs for commercial nuclear reactors, or the components thereof, that the Secretary determines exhibit some or all of the characteristics set forth in subsection (a).

(2) The Secretary shall provide Congress with an annual report describing the progress in the previous year in certifying standard designs under paragraph (1) and setting forth plans for the certification program for the coming year.

SEC. 12004. DECISIONS BY THE SECRETARY.

(a) PUBLIC MEETINGS.—Within sixty days after the date of the enactment of this title, the Secretary shall commence public meetings to develop information upon which to base the decisions and recommendations required by this section.

(b) PUBLIC MEETINGS ON FUTURE PROGRAM.—These public meetings shall examine—

(1) the need for, and the potential for adoption in the future by electric utilities or other entities of, advanced nuclear reactor technologies that are available or under development for the generation of energy from nuclear fission;

(2) how the Federal Government, acting through the Secretary (including actions of the Secretary under this title), can be effective in ensuring the availability of these advanced nuclear reactor technologies when they may be needed;

(3) whether the Secretary should solicit cooperation from the private sector in carrying out the advanced nuclear reactor technology commercialization programs authorized in sections 12005 and 12006; and

(4) potential alternative funding sources to carry out the purposes of this title.

(c) In carrying out the public meetings under subsection (a) the Secretary shall offer members of the public an opportunity to provide information and comment and solicit the views of the Commission and other interested parties.

(d) REPORT.—(1) The public meetings shall conclude no later than one hundred and eighty days after the date of the enactment of this title.

(2) Within ninety days after the conclusion of the public meetings the Secretary shall submit to Congress a report summarizing the results of the public meetings and setting forth the Secretary's plan for carrying out the purposes of this title. The report shall indicate how the Secretary's plan will further the purposes set forth in section 12002(b) and the objectives set forth in section 12003(a). In developing the plan the Secretary shall take into account—

(A) the views received during the public meetings;

(B) the need, as determined by the Secretary, for available commercial electric power supply technologies based on nuclear fission and the time when necessary action to satisfy this need will become urgent; and

(C) the probability that the Secretary's actions under this section will contribute substantially to the availability of commercial electric power from advanced nuclear reactor technologies.

(e) DECISIONS ABOUT FUTURE COMMERCIALIZATION PROGRAMS.—As part of the report under subsection (d) the

Secretary shall issue a decision whether or not to conduct the solicitations authorized under sections 12005 and 12006, together with the reasons for this decision.

SEC. 12005. COMMERCIALIZATION OF NUCLEAR REACTOR TECHNOLOGY.

(a) USE OF AUTHORITY OF THE SECRETARY.—The Secretary shall use the authority under this section and other authorities available to the Secretary to encourage the siting, financing, licensing, construction, and operation of facilities for the generation of commercial electric power from nuclear fission in regions where the Secretary, after consultation with appropriate agencies in the affected States, finds a need for additional electric generating capacity.

(b) SOLICITATION.—(1) At any time after publication of the report under section 12004(d), the Secretary, in consultation with the Commission, may solicit proposals for collaboration with one or more private parties who agree to become applicants for necessary permits for the construction and operation of facilities for the generation of commercial electric power from nuclear fission. In any solicitation under this subsection, the Secretary shall offer, in the case of accepted proposals, to—

(A) assist in the identification of private financing arrangements that to the maximum extent practicable under existing law minimize the risk in financing the construction and operation of the proposed facility;

(B) appear on behalf of applicants before any authority, including the Commission or appropriate State and local regulatory authorities, with jurisdiction over the proposed facility;

(C) be responsible for the costs of any new requirements imposed by the Commission after issuance by the Commission of a license for the construction of the proposed facility: *Provided*, That the Federal Government shares equitably in the revenues from operation by the facility; and

(D) otherwise seek to expedite the construction and operation of the proposed facility using authority available to the Secretary.

(2) Any person may petition the Secretary requesting an additional solicitation pursuant to paragraph (1). If the Secretary determines such solicitation would advance the purposes of this title, the Secretary shall solicit proposals.

(c) COMMENT.—The Secretary shall offer an opportunity for interested persons, including the Commission, to comment on any proposal received under subsection (b). The Secretary shall offer technical assistance to any applicant whose proposal shows promise for selection under this section and shall permit such applicant to modify his proposal. The Secretary shall consult with the Commission on ways to improve the prospects for licensing any proposed facility that may be acceptable under this section.

(d) SELECTION.—(1) Within one hundred and eighty days after receipt of a proposal under subsection (b), the Secretary shall decide whether to select any proposal submitted under this title.

(2) The decision to accept any proposal shall be transmitted promptly to Congress, and not less than forty-five calendar days shall pass before such decision is effective.

(3) The interpretation and application of the selection criteria set forth in subparagraphs (A) through (F) are within the sole discretion of the Secretary. In deciding whether to select a proposal under this section, the Secretary shall take into account—

(A) the extent to which the technology proposed exhibits the characteristics set forth in section 12003(a);

(B) whether acceptance of the proposal will encourage use of a standard reactor design for the technology in question;

(C) the probability that the facility can be successfully financed, constructed, and licensed;

(D) the probability under the proposal that the Federal Government will receive an equitable share of revenues from operation of the proposed facility;

(E) the importance of the Secretary's contribution under this section to successful construction and operation of the proposed facility; and

(F) the extent to which the successful construction and operation of the facility will improve the availability of nuclear reactor technologies for generating commercial electric power.

(4) If the Secretary determines that no proposals submitted pursuant to subsection (b) are acceptable, the Secretary may solicit additional proposals.

(e) FUNDING.—To the extent provided in advance in appropriations Acts, the Secretary may provide funds to cover costs referred to in subsection (b)(1)(C).

(f) LICENSING.—(1)(A) The facilities covered by any proposal selected under subsection (d) shall be subject to Commission licensing as provided by the Atomic Energy Act of 1954, as amended by title XIII of this Act, and this paragraph.

(B) The Commission may issue a combined construction permit and operating license for a facility covered by a proposal selected under subsection (d) after providing an opportunity for a hearing under section 189a. of the Atomic

Energy Act, if the Commission finds that there is reasonable assurance that the facility will be constructed and will operate in conformity with the application for the facility, applicable provisions of the Atomic Energy Act, and applicable regulations of the Commission. The Commission shall ensure through inspections, tests and analyses that construction is completed in conformity with the combined construction permit and operating license.

(C) Before operation of any facility licensed under this subsection, the Commission shall publish in the Federal Register a notice of the intended operation of the facility, and shall provide a thirty-day period within which any person whose interest may be affected may file a written objection to operation of the facility on the ground that the facility has not been constructed or will not operate in conformity with the license. The objection must set forth with specificity and in reasonable detail the facts and arguments upon which the objection is based, and may be accompanied by a request for a hearing. Unless a prior hearing is granted in accordance with the requirements of this subsection, operation of the facility shall commence and the Commission shall publish a brief statement of any issues raised in the objection and their resolution by the Commission.

(D) The Commission may grant a hearing under this subsection only if—

(i) a showing is made that a substantial dispute of material fact exists that has not been previously considered by the Commission and that cannot be resolved with sufficient accuracy except at a hearing; and

(ii) a showing is made that there has been nonconformance with the combined license that has not been corrected and that could materially and adversely affect the safe operation of the facility.

Following completion of any hearing, the Commission shall decide whether or not to modify or condition the license.

(2) Within two years after selection of a proposal under subsection (d), the Secretary shall recommend to the Commission any changes in Commission regulations that would improve, consistent with existing law, prospects for the successful licensing of the facilities covered by such proposal.

SEC. 12006. COMMERCIALIZATION OF ADVANCED REACTOR TECHNOLOGY.

(a) USE OF AUTHORITY OF THE SECRETARY.—The Secretary shall use the authority under this section and other authority available to the Secretary to commercialize promising advanced nuclear reactor technologies for the generation of commercial electric power.

(b) REQUEST FOR PROPOSALS.—

(1) Within ninety days after the publication of the report under section 12004(d), the Secretary, after con-

sultation with the Commission, may issue a draft request for proposals for the construction of a commercial-scale reactor employing advanced nuclear reactor technology that—

(A) exhibits the characteristics set forth in section 12003(a);

(B) minimizes to the extent practicable the volume or toxic lifetime of nuclear waste produced and the cost of nuclear waste disposal;

(C) is reasonably designed to maximize acceptance by the public, the financial community, electric utilities, State electric utility regulators, and the Commission; and

(D) could provide commercial electric power to a utility grid as soon as practicable but no later than the year 2010.

(2) Any proposal under paragraph (1) shall—

(A) set forth the management structure for the project specifying a single entity that will be in control of the project; and

(B) indicate how this structure ensures timely operation of the facility within the budget proposed.

(3) The Secretary shall offer an opportunity for interested persons to comment on the draft request for

proposals. The Commission shall comment on such draft request. The Secretary shall consider and publish a summary response to any comments received within ninety days after issuance of the draft request for proposals.

(4)(A) Within one hundred and eighty days after publication of the report under section 12004(d)(2), the Secretary may issue a request for proposals under this section. Final proposals may be submitted to the Secretary within one hundred and eighty days after the request for proposals is issued under this paragraph, except that the Secretary may extend this deadline for up to an additional one hundred and eighty days if the Secretary determines that such extension is necessary to permit promising proposals to be submitted.

(B) The Secretary may provide technical assistance for the development of proposals the Secretary considers promising.

(C) The Secretary may modify and reissue the request for proposals under subparagraph (A) so as to encourage the submission of additional proposals if, in his judgment—

(i) there will be insufficient competition among the proposals received under this section; or

(ii) there are promising advanced nuclear reactor technologies which are not represented in the proposals received and receipt of proposals representing such technologies would foster competition or advance the purposes of this title.

(5)(A) The Secretary shall decide whether to select any proposal received under this section within one hundred and eighty days after the corresponding initial proposal is submitted.

(B) The decision to accept any proposal shall be transmitted promptly to Congress, and not less than forty-five calendar days shall pass before such decision is effective.

(C) The interpretation and application of the selection criteria set forth in clauses (i) through (vii) are within the sole discretion of the Secretary. In deciding whether to select a proposal under this section, the Secretary shall take into account—

(i) the extent to which the advanced nuclear reactor technology proposed exhibits the characteristics set forth in section 12003(a);

(ii) the probability that the commercialization project can be successfully financed, constructed, and licensed;

(iii) the importance of the Federal contribution under this subsection to successful commercialization of the technology proposed;

(iv) the extent to which the successful construction of the project will improve the availability of advanced nuclear reactor technologies;

(v) the probability that technology and design features exhibited by the project can be deployed commercially by the utility industry in a timely fashion;

(vi) the probability under the proposal that the Federal Government receive an equitable share of revenues from operation of the proposed facility; and

(vii) the extent to which selection of the project otherwise furthers the purposes of this title.

(c) FUNDING.—To the extent provided in advance in appropriations Acts, the Secretary may provide funds for construction of a commercialization project under an acceptable proposal selected under subsection (b). Such funds may be provided only if the proposal selected by the Secretary provides for—

(1) at least 50 per centum of project costs to be provided from non-Federal sources; and

(2) non-Federal financial responsibility for any and all costs in excess of the specific amounts authorized by the Secretary to be paid under the accepted proposal.

(d) LICENSING.—(1) Any project under this section shall be subject to licensing requirements of the Atomic Energy Act of 1954, as amended, as if such project were a commercial utilization facility under such Act, and may be issued a combined construction permit and operating license in accordance with the provisions of section 12005(f)(1).

(2) Within one year after selection by the Secretary of a proposal under subsection (b), the Secretary shall recommend to the Commission any changes in Commission regulations that would improve, consistent with existing law, prospects for the successful licensing of the commercialization project under this subsection.

SEC. 12007. APPROPRIATIONS.

(a) No more funds may be appropriated to carry out the purposes of this title set forth in section 12002(b) than the amounts set forth in subsection (b). This title shall be the exclusive source of authorization for appropriations of funds to support any activities of the Secretary leading to the commercialization of advanced nuclear reactor technologies.

(b)(1) For the fiscal year beginning on October 1, 1992, not more than $100 million may be appropriated for activities described in subsection (a);

(2) For the fiscal year beginning October 1, 1993, not more than $200 million may be appropriated for activities described in subsection (a); and

(3) For the fiscal year beginning October 1, 1994, not more than $200 million may be appropriated for activities described in subsection (a).

SEC. 12008. REPORTS.

(a) RECOMMENDATIONS BY THE COMMISSION.—

(1) Within two years after the selection of a proposal under section 12006, the Commission, after consultation with the Secretary and opportunity for public comment, shall submit to Congress specific recommendations for changes in law that the Commission finds necessary for the timely licensing, consistent with the public health and safety, of commercial nuclear power reactors whose design is based on the project under section 12006.

(2) The Secretary shall provide Congress with the comments on the recommendations of the Commission submitted under paragraph (1).

(b) REPORT BY THE COMMISSION.—

(1)(A) In order to assess whether the purposes of this title may be achieved in whole or in part by the availability in the United States of advanced nuclear reactor technologies already in use or under development in other nations, the Secretary shall review commercial nuclear reactor technologies in use or under development in other nations and, within one year after the date of the enactment of this section, provide Congress and the Commission with an initial assessment of the extent to which any such technologies may exhibit characteristics set forth in paragraphs (1), (2) and (4) of section 12003(a).

(B) If the Secretary finds that a technology reviewed under subparagraph (A) has the potential to exhibit such characteristics, he shall identify the technology and include a thorough discussion of his findings in the assessment under this paragraph.

(2) Within one year after receipt of the Secretary's initial assessment under paragraph (1), the Commission shall report to Congress on the problems of licensing under the Atomic Energy Act of 1954, as amended, of commercial nuclear reactor technologies that the Secretary has identified under subparagraph (1)(B).

(3) Before submitting the report under paragraph (2) the Commission shall make available to the public a draft report and provide opportunity for comment on the draft report.

(4) The report of the Commission under paragraph (2) shall identify specific impediments to licensing under the Atomic Energy Act of 1954, as amended, for each technology considered and shall indicate how, or if, such impediments might be removed by amendments to law or regulation consistent with the public health and safety.

(c) REPORT BY THE SECRETARY.—The Secretary, in consultation with the Commission, shall submit an annual report to Congress on activities under this title assessing the progress during the previous year in achieving the purposes of this title and the prospects for further progress in the coming year.

TITLE XIII—NUCLEAR REACTOR LICENSING

SEC. 13001. SHORT TITLE.

This title may be cited as the "Nuclear Reactor Licensing Act of 1991.".

SEC. 13002. REACTOR LICENSING.

Section 189a. of the Atomic Energy Act of 1954 (42 U.S.C. 2239(a)) is amended by redesignating paragraph (1) as paragraph (1)(A) and inserting the following:

"(B) In the case of an application for a combined license to construct and operate a facility under subsection 161h., the Commission shall hold a hearing on such application prior to the granting of the combined license. Upon the completion of construction of the facility and upon finding the facility authorized has been constructed and will operate in conformity with the combined license, and in the absence of any good cause being shown to the Commission why operation should not proceed in accordance with the combined license, operation may proceed notwithstanding the pendency before the Commission of a request for a hearing under this section unless:

"(i) a showing is made that a substantial dispute of material fact exists that has not been previously considered by the Commission and that cannot be resolved with sufficient accuracy except at a hearing; and

"(ii) a showing is made that there has been nonconformance with the combined license that has not been corrected and that could materially and adversely affect the safe operation of the facility.

"Any hearing held under this section after the granting of a combined license to construct and operate a facility shall be limited to issues of nonconformance with the combined license.".

TITLE XIV—URANIUM

Subtitle A—Uranium Enrichment

SEC. 14001. SHORT TITLE.—This subtitle may be cited as the "Uranium Enrichment Act of 1991".

SEC. 14002. DELETION OF SECTION 161v.—Subsection 161v. of the Atomic Energy Act of 1954, as amended, is deleted and the remaining subsections are relettered accordingly.

SEC. 14003. REDIRECTION OF THE URANIUM ENRICHMENT ENTERPRISE OF THE UNITED STATES.—The Atomic Energy Act of 1954, as amended (42 U.S.C. 2011–2296) is further amended by—

(a) inserting at the commencement thereof after the words "ATOMIC ENERGY ACT OF 1954":

"TITLE I—ATOMIC ENERGY"; and

(b) adding at the end thereof the following:

"TITLE II—UNITED STATES ENRICHMENT CORPORATION

"CHAPTER 21. FINDINGS

"SEC. 1101. FINDINGS.—The Congress of the United States finds that—

"a. The enrichment of uranium is essential to the national security and energy security of the United States.

"b. A competitive, well-managed and efficient enrichment enterprise provides important economic benefits to the United States and contributes to a highly favorable foreign trade balance.

"c. A strong United States enrichment enterprise promotes United States nonproliferation policies by requiring accountability for United States enriched uranium.

"d. The operation of uranium enrichment facilities must meet high standards for environmental health and safety.

"e. The operation and management of a uranium enrichment enterprise requires a commercial business orientation in order to engender customer support and confidence, and customers, rather than the taxpayers at large, should bear the costs of commercial uranium enrichment services.

"f. The optimal level of expenditures for the uranium enrichment enterprise fluctuates and cannot be accurately predicted or efficiently financed if subject to annual authorization and appropriation.

"g. Flexibility is essential to adapt business operations to a competitive marketplace.

"h. The events of the recent past, including the emergence of foreign competition, have brought new and unforeseen forces to bear upon the management and operation of the Government's uranium enrichment enterprise.

"i. The present operation of the uranium enrichment enterprise must be changed so as to further the national interest in the enterprise and respond to the competitive demand placed upon it by market forces, while continuing to meet the paramount objective of ensuring the Nation's common defense and security.

"CHAPTER 22. DEFINITIONS, ESTABLISHMENT OF CORPORATION AND PURPOSES

"Sec. 1201. Definitions.—For the purpose of this title:

"a. The term 'Secretary' means the Secretary of Energy.

"b. The term 'Department' means the Department of Energy of the United States.

"c. The term 'Administrator' means the chief executive officer of the United States Enrichment Corporation.

"d. The term 'Corporation' means the United States Enrichment Corporation.

"e. The term 'Corporate Board' means the appointed members of the official advisory panel appointed by the President pursuant to section 1503 of this title.

"f. The term 'uranium enrichment' means the separation of uranium of a given isotopic content into two components, one having a higher percentage of a fissile isotope and one having a lower percentage.

"g. The term 'remedial action' has the same meaning as defined in section 120(24) of the Comprehensive Environmental Response, Compensation and Liability Act.

"h. The term 'decontamination and decommissioning' means those activities undertaken to decontaminate and decommission inactive facilities that have residual radioactive or mixed radioactive and hazardous chemical contamination.

"SEC. 1202. ESTABLISHMENT OF THE CORPORATION.—

"a. There is hereby created a body corporate to be known as the 'United States Enrichment Corporation'.

"b. The Corporation shall—

"(1) be established as a wholly owned Government corporation subject to the Government Corporation Control Act, as amended (31 U.S.C. 9101–9109), except as otherwise provided herein; and

"(2) be an agency and instrumentality of the United States.

"SEC. 1203. PURPOSES.—The Corporation is created for the following purposes:

"(1) to acquire feed material for uranium enrichment, enriched uranium, the Department's uranium previously set aside for commercial purposes, and the Department's uranium enrichment and related facilities;

"(2) to operate, and as required by business conditions, to expand or construct facilities for uranium enrichment or both;

"(3) to market and sell enriched uranium and uranium enrichment and related services to—

"(A) the Department for governmental purposes; and

"(B) qualified domestic and foreign persons;

"(4) to conduct research and development as required to meet corporate objectives for the purpose of identifying, evaluating, improving and testing processes for uranium enrichment;

"(5) to operate, as a commercial enterprise, on a profitable and efficient basis; in order to maximize the long term economic value of the Corporation to the United States Government including the payment of dividends to the Treasury as a return on the United States Government investment;

"(6) to conduct the business as a self-financing corporation and eliminate the need for appropriations or other sources of Government financing after enactment of this title;

"(7) to maintain a reliable and economical domestic source of enrichment services;

"(8) to conduct its activities in a manner consistent with the health and safety of the public;

"(9) to continue to meet the paramount objectives of ensuring the Nation's common defense and security (including consideration of United States policies concerning nonproliferation of atomic weapons and other nonpeaceful uses of atomic energy); and

"(10) to take all other lawful action in furtherance of the foregoing purposes.

"CHAPTER 23. CORPORATE OFFICES

"SEC. 1301. CORPORATE OFFICES.—The Corporation shall maintain an office for the service of process and papers in the District of Columbia, and shall be deemed, for purposes of venue in civil actions, to be a resident thereof. The Corporation may establish offices in such other place or places as it may deem necessary or appropriate in the conduct of its business.

"CHAPTER 24. POWERS AND DUTIES OF THE CORPORATION

"SEC. 1401. SPECIFIC CORPORATE POWERS AND DUTIES.— The Corporation—

"a. shall perform uranium enrichment or provide for uranium to be enriched by others at facilities of the Corporation; contracts in existence as of the date of enactment of this title between the Department and persons under contract to perform uranium enrichment and related services at facilities of the Department shall continue in effect as if the Corporation, rather than the Department, had executed these contracts;

"b. shall conduct, or provide for the conduct of, research and development activities related to the isotopic separation of uranium as the Corporation deems necessary or advisable for purposes of maintaining the Corporation as a continuing, commercial enterprise operating on a profitable and efficient basis;

"c. may acquire or distribute enriched uranium, feed material for uranium enrichment or depleted uranium is transactions with—

"(1) persons licensed under sections 53, 63, 103, or 104 of title I in accordance with the licenses held by such persons;

"(2) persons in accordance with, and within the period of, an agreement for cooperation arranged pursuant to section 123 of title I; or

"(3) as otherwise authorized by law;

"d. may—

"(1) enter into contracts with persons licensed under section 53, 63, 103, or 104 of title I for such periods of time as the Corporation may deem necessary or desirable, to provide uranium or uranium enrichment and related services; and

"(2) enter into contracts to provide uranium or uranium enrichment and related services in accordance with, and within the period of, an agreement for cooperation arranged pursuant to section 123 of title I or as otherwise authorized by law;

"e. shall sell to the Department as provided in this title, and without regard to section 57 e. of title I or the provisions of section 1535 of title 31, United States Code, such amounts of uranium or uranium enrichment and related services as the Department may determine from time to time are required: (1) for the Department to carry out Presidential direction and authorizations pursuant to section 91 of title I; and (2) for the conduct of other Department programs;

"f. may grant licenses, both exclusive and nonexclusive, for the use of patent and patent applications owned by the Corporation, and establish and collect charges, in the form of royalties or otherwise, for utilization of Corporation-owned facilities, equipment, patents, and technical information of a proprietary nature pertaining to the Corporation's activities.

"SEC. 1402. GENERAL POWERS OF THE CORPORATION.—In order to accomplish the purposes of this title, the Corporation—

"a. shall have perpetual succession unless dissolved by Act of Congress;

"b. may adopt, alter, and use a corporate seal, which shall be judicially noticed;

"c. may sue and be sued in its corporate name and be represented by its own attorneys in all judicial and administrative proceedings;

"d. may indemnify the Administrator, officers, attorneys, agents and employees of the Corporation for liabilities and expenses incurred in connection with their corporate activities;

"e. may adopt, amend, and repeal bylaws, rules and regulations governing the manner in which its business may be conducted and the power granted to it by law may be exercised and enjoyed;

"f. (1) may acquire, purchase, lease, and hold real and personal property including patents and proprietary data, as it deems necessary in the transaction of its business, and sell, lease, grant, and dispose of such real and personal property, as it deems necessary to effectuate the purposes of this title and without regard to the Federal Property and the Administrative Services Act of 1949, as amended;

"(2) Purchases, contracts for the construction, maintenance, or management and operation of facilities and contracts for supplies or services, except personal services, made by the Corporation shall be made after advertising, in such manner and at such times sufficiently in advance of opening bids, as the Corporation shall determine to be adequate to insure notice and an opportunity for competition: *Provided*, That advertising shall not be required when the Corporation determines that the making of any such purchase or contract without advertising is necessary in the interest of furthering the purposes of this title, or that advertising is not reasonably practicable;

"g. with the consent of the agency or government concerned, may utilize or employ the services or personnel of any Federal Government agency, or any State or local government, or voluntary or uncompensated personnel to perform such functions on its behalf as may appear desirable;

"h. may enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its business and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State, territory or possession, or with any political subdivision thereof, or with any person, firm, association, or corporation;

"i. may determine the character of and the necessity for its obligations and expenditures and the manner in which they shall be incurred, allowed, and paid, subject to the provisions of this title and other provisions of law specifically applicable to wholly-owned Government corporations;

"j. notwithstanding any other provision of law, and without need for further appropriation, may use monies, unexpended appropriations, revenues and receipts from operations, amounts received from obligations issued and other assets of the Corporation in accordance with section 1505, without fiscal year limitation, for the payment of expenses and other obligations incurred by the Corporation in carrying out its functions under, and within the requirements of, this title;

and shall not be subject to apportionment under the provisions of subchapter II of chapter 15 of title 31, United States Code.

"k. may settle and adjust claims held by the Corporation against other persons or parties and claims by other persons or parties against the Corporation;

"l. may exercise, in the name of the United States, the power of eminent domain for the furtherance of the official purposes of the Corporation;

"m. shall have the priority of the United States with respect to the payment of debts out of bankrupt, insolvent, and decedents' estates;

"n. may define appropriate information as 'Government Commercial Information' and exempt such information from mandatory release pursuant to section 552(b)(3) of title 5, United States Code, when it is determined by the Administrator that such information if publicly released would harm the Corporation's legitimate commercial interests or those of a third party;

"o. may request, and the Administrator of General Services, when requested, shall furnish the Corporation such services as he is authorized to provide agencies of the United States;

"p. may accept gifts or donations of services, or of property, real, personal, mixed, tangible or intangible, in aid of any purposes herein authorized; and

"q. may execute, in accordance with its bylaws, rules and regulations, all instruments necessary and appropriate in the exercise of any of its powers.

"r. shall pay any settlement or judgment entered against it from the Corporation's own funds and not from the Judgment Appropriation (31 U.S.C. 1304). The provisions of the Federal Tort Claims Act (28 U.S.C. 1346(b) and 2671 et seq.) shall not apply to any claims arising from the activities of the Corporation after the effective date of this statute: *Provided*, That this subsection shall not apply to liability or claims arising from a nuclear incident, if such incident occurs prior to the licensing of the Corporation's existing Gaseous Diffusion Facilities under Section 1601 of this title.

"SEC. 1403. CONTINUATION OF CONTRACTS, ORDERS, PROCEEDINGS AND REGULATIONS.—

"a. Except as provided elsewhere in this title, all contracts, agreements, and leases with the Department, and licenses, and privileges that have been afforded to the Department prior to the date of the enactment of this title and that relate to uranium enrichment, including all enrichment services contracts, power purchase contracts and the December 18, 1987 Settlement Agreement with the Tennessee Valley Authority regarding payment of capacity charges under the Department's two power contracts with the Tennessee Valley Authority, shall continue in effect as if the Corporation had executed such contracts, agreements, or leases or had been afforded such licenses and privileges.

"b. As related to the functions vested in the Corporation by this title, all orders, determinations, rules, regulations and privileges of the Department shall continue in effect and remain applicable to the Corporation until modified, terminated, superseded, set aside or revoked by the Corporation, by any court of competent jurisdiction, or by operation of law unless otherwise specifically provided in this title.

"c. Except as provided elsewhere in this title, the transfer of functions related to and vested in the Corporation by this title shall not affect proceedings judicial or otherwise, relating to such functions which are pending at the time this title takes effect, and such proceedings shall be continued with the Corporation, as appropriate.

"SEC. 1404. LIABILITIES.—Except as provided elsewhere in this title, all liabilities attributable to operation of the uranium enrichment enterprise prior to the date of the enactment of this title shall remain direct liabilities of the Government of the United States; with regard to any claim seeking to impose such liability, section 1403 shall not be applicable and the United States shall be represented by the Department of Justice.

"CHAPTER 25. ORGANIZATION, FINANCE AND MANAGEMENT

"SEC. 1501. ADMINISTRATOR.—

"a. The management of the Corporation shall be vested in an Administrator who shall be appointed by the President, by and with the advice and consent of the Senate, without regard to political affiliation. The Administrator shall be a person who, by reason of professional background and experience is specially qualified to manage the Corporation: *Provided, however*, That upon enactment of this title, the President shall appoint an existing officer or employee of the United States to act as Administrator until the office is filled.

"b. The Administrator—

"(1) shall be the chief executive officer of the Corporation and shall be responsible for the management and direction of the Corporation. The Administrator shall establish the offices, appoint the officers and employees of the Corporation (including attorneys), and define their responsibilities and duties. The Administrator shall appoint other officers and employees as may be required to conduct the Corporation's business;

"(2) shall serve a term of six years but may be reappointed;

"(3) shall, before taking office, take an oath to faithfully discharge the duties thereof;

"(4) shall have compensation determined by the President based upon the recommendation of the Secretary and the Corporate Board as provided in section 1503 c., except that in the absence of such determination compensation shall be set at Executive Level I, as prescribed in section 5312 of title 5, United States Code;

"(5) shall be a citizen of the United States;

"(6) shall designate an officer of the Corporation who shall be vested with the authority to act in the capacity of the Administrator in the event of absence or incapacity; and

"(7) may be removed from office only by the President and only for neglect of duty or malfeasance in office. The President shall communicate the reasons for any such removal to both Houses of Congress at least 30 days prior to the effective date of such removal.

"c. (1) The Secretary shall exercise general supervision over the Administrator only with respect to the activities of the Corporation involving—

"(A) the Nation's common defense and security; and

"(B) health, safety and the environment.

"(2) The Administrator shall be solely responsible for the exercise of all powers and responsibilities that are committed to the Administrator under this title and that are not reserved to the Secretary under paragraph (1), and, notwithstanding the provisions of section 9104(a)(4) of title 31, United States Code, including the setting of the appropriate amount of, and paying, any dividend under section 1506 c. and all other fiscal matters.

"SEC. 1502. DELEGATION.—The Administrator may delegate to other officers or employees powers and duties assigned to the Corporation in order to achieve the purposes of this title.

"SEC. 1503. CORPORATE BOARD.—There is hereby established a Corporate Board appointed by the President which shall consist of five members, one of whom shall be designated as chairman. Members of the Corporate Board shall be individuals possessing high integrity, demonstrated accomplishment and broad experience in management and shall have strong backgrounds in science, engineering, business or finance. At least one member of the Corporate Board shall be, or previously have been, employed on a full-time basis in managing an electric utility:

"a. (1) The specific responsibilities of the Corporate Board shall be to—

"(A) review the Corporation's policies and performance and advise the Administrator and the Secretary on these matters; and

"(B) advise the Administrator and the Secretary on any other such matters concerning the Corporation as may be referred to the Corporate Board.

"(2) The Board shall have the right to recommend removal of the Administrator. In the event such recommendation is made, it shall be transmitted to the President by the Secretary, together with the Secretary's own recommendation on removal of the Administrator.

"b. Members of the Board shall be provided access to all significant reports, memoranda, or other written communications generated or received by the Corporation. At the request of the Board, the Corporation shall make available to the Board all financial records, reports, files, papers and memoranda of, or in use by, the Corporation.

"c. When appropriate, the Corporate Board may make recommendations to the Secretary concerning the compensation to be received by the Administrator and the ten officers of the Corporation who may receive compensation in excess of Executive Level II as provided in section 1504 a. The Secretary shall transmit such recommendations to the President together with the Secretary's own recommendations concerning compensation. In the event that less than three members of the Corporate Board are in office, recommendations concerning compensation may be made by the Secretary alone. The President shall have the power to enter into binding agreements concerning compensation to be received by the Administrator during his term of office and by the ten officers described in section 1504 a. during their term of employment, regardless of any recommendation received or not received under this title.

"d. Except for initial appointments, members of the Corporate Board shall serve five-year terms. Each member of the Corporate Board shall be a citizen of the United States. No more than three members of the Board shall be members of any one political party. Of those first appointed, the chairman shall serve for the full five-year term; one member shall serve for a term of four years; one shall serve for a term of three years; one shall serve for a term of two years; and one shall serve for a term of one year.

"e. Upon expiration of the initial term, each Corporate Board member appointed thereafter shall serve a term of five years. Upon the occurrence of a vacancy on the Board, the President shall appoint an individual to fill such vacancy for the remainder of the applicable term. Upon expiration of a term, a Board member may continue to serve up to a maximum of one year or until a successor shall have been appointed and assumed office, whichever occurs first.

"f. The members of the Corporate Board in executing their duties shall be governed by the laws and regulations regarding conflicts of interest, but exempted from other provisions and authority prescribed by the Federal Advisory Committee Act, as amended (5 U.S.C. appendix 2).

"g. The Corporate Board shall meet at any time pursuant to the call of the Chairman and as provided by the bylaws of the Corporation, but not less than quarterly. The Administrator or his representative shall attend all meetings of the Corporate Board.

"h. The Corporation shall compensate members of the Corporate Board at a per diem rate equivalent to Executive Level III, as defined in section 5314 of title 5, United States Code, in addition to reimbursement of reasonable expenses incurred when engaged in the performance of duties vested in the Corporate Board. Any Corporate Board member who is otherwise a Federal employee shall not be eligible for compensation above reimbursement for reasonable expenses incurred while attending official meetings of the Corporation.

"i. (1) The Corporate Board shall report at least annually to the Administrator on the performance of the Corporation and the issues that, in the opinion of the Board, require the attention of the Administrator. Any such report shall include such recommendations as the Board finds appropriate. A copy of any report under this subsection shall be transmitted promptly to the President, the Secretary, the Committee on Energy and Natural Resources of the Senate and to the Speaker of the House of Representatives.

"(2) Within ninety days after the receipt of any report under this subsection the Administrator shall respond in writing to such report and provide an analysis of such recommendations of the Board contained in the report. Such response shall include plans for implementation of each recommendation or a justification for not implementing such recommendation. A copy of any response under this subsection shall be transmitted promptly to the President, the Secretary, the Committee on Energy and Natural Resources and to the Speaker of the House of Representatives.

"SEC. 1504. EMPLOYEES OF THE CORPORATION.—Officers and employees of the Corporation shall be officers and employees of the United States:

"a. The Administrator shall appoint all officers, employees and agents of the Corporation as are deemed necessary to effect the provisions of this title without regard to any administratively imposed limits on personnel, and any such officer, employee or agent shall only be subject to the supervision of the Administrator. The Administrator shall fix all compensation in accordance with the comparable pay provisions of section 5301 of title 5, United States Code, with compensation levels not to exceed Executive Level II, as defined in section 5313 of title 5, United States Code: *Provided*, That the Administrator may, upon recommendation by the Secretary and the Corporate Board as provided in section 1503 c. and approval by the President, appoint up to ten officers whose compensation shall not exceed an amount which is 20 per centum less than the compensation received by the Administrator, but not less than Executive Level II. The Administrator shall define the duties of all officers and employees and provide a system of organization inclusive of a personnel management system to fix responsibilities and promote efficiency. The Corporation shall assure that the personnel function and organization is consistent with the principles of section 2301(b) of title 5, United States Code, relating to merit system principles. Officers and employees of the Corporation shall be appointed, promoted and assigned on the basis of merit and fitness, and other personnel actions shall be consistent with the principles of fairness and due process but without regard to those provisions of title 5 of the United States Code governing appointments and other personnel actions in the competitive service.

"b. Any Federal employee hired before January 1, 1984, who transfers to the Corporation and who on the day before the date of transfer is subject to the Federal Civil

Service Retirement System (5 U.S.C. chapter 83, subchapter III) shall remain within the coverage of such system unless he or she elects to be subject to the Federal Employees' Retirement System. For those employees remaining in the Federal Civil Service Retirement System, the Corporation shall withhold pay and shall pay into the Civil Service Retirement and Disability Fund the amounts specified in chapter 83 of title 5, United States Code. Employment by the Corporation without a break in continuity of service shall be considered to be employment by the United States Government for purposes of subchapter III of chapter 83 of title 5, United States Code. Any employee of the Corporation who is not within the coverage of the Federal Civil Service Retirement System shall be subject to the Federal Employees' Retirement System (5 U.S.C. chapter 84). The Corporation shall withhold pay and make such payments as are required under that retirement system. Further:

"(1) Any employee who transfers to the Corporation under this section shall not be entitled to lump sum payments for unused annual leave under section 5551 of title 5, United States Code, but shall be credited by the Corporation with the unused annual leave at the time of transfer.

"(2) An employee who does not transfer to the Corporation and who does not otherwise remain a Federal employee shall be entitled to all the rights and benefits available under Federal law for separated employees, except that severance pay shall not be payable to an employee who does not accept an offer of employment from the Corporation of work substantially similar to that performed by the employee for the Department.

"c. This section does not affect a right or remedy of an officer, employee, or applicant for employment under a law prohibiting discrimination in employment in the Government on the basis of race, color, religion, age, sex, national origin, political affiliation, marital status, or handicap conditions.

"d. Officers and employees of the Corporation shall be covered by chapter 73 of title 5, United States Code, relating to suitability, security, and conduct.

"e. Compensation, benefits, and other terms and conditions of employment in effect immediately prior to the effective date of this section, whether provided by statute or by rules and regulations of the Department or the executive branch of the Government of the United States shall continue to apply to officers and employees who transfer to the Corporation from other Federal employment until changed by the Corporation in accordance with the provisions of this title.

"f. The provisions of sections 3323(a) and 8344 of title 5, United States Code, or any other law prohibiting or limiting the reemployment of retired officers or employees or the simultaneous receipt of compensation and retired pay or annuities, shall not apply to officers and employees of the Corporation who have retired from or ceased previous government service prior to April 28, 1987.

"SEC. 1505. TRANSFER OF PROPERTY TO THE CORPORATION.—In order to enable the Corporation to exercise the powers and duties vested in it by this title:

"a. The Secretary, as requested by the Administrator, is authorized and directed to transfer without charge to the Corporation all of the Department's right, title, or interest in and to, real or personal properties owned by the Department, or by the United States but under control or custody of the Department, which are related to and materially useful in the performance of the functions transferred by this title, including but not limited to the following—

"(1) production facilities for uranium enrichment inclusive of real estate, buildings and other improvements at production sites and their related and supporting equipment: *Provided,* That facilities, real estate, improvements and equipment related to the Oak Ridge Gaseous Diffusion Plant in Oak Ridge, Tennessee, and to the gas centrifuge enrichment program shall not transfer under this paragraph except for diffusion cascades and related equipment needed by the

Corporation for replacement parts: *Provided further*, That any enrichment facilities retained by the Department shall not be used to enrich uranium in competition with the Corporation. This paragraph shall not prejudice consideration of any site as a candidate site for future expansion or replacement of uranium enrichment capacity;

"(2) at such time subsequent to the year 2000 as the Secretary determines that the Oak Ridge Gaseous Diffusion Plant should be decommissioned or decontaminated, or both, the Secretary shall convey without charge equipment and facilities relating to the Oak Ridge Gaseous Diffusion Plant not transferred in paragraph (1) to the Corporation;

"(3) facilities, equipment, and materials for research and development activities related to the isotopic separation of uranium by the gaseous diffusion technology;

"(4) The Department's stocks of preproduced enriched uranium, but excluding stocks of highly enriched uranium: *Provided*, That approximately two metric tons of the Department's highly enriched uranium shall be loaned to the Corporation as required for working inventory;

"(5) the Department's stocks of feed materials for uranium enrichment except for the quantities allocated to the national defense activities of the Department as of the date of enactment;

"(A) the Department's stockpile of enrichment tails existing as of the date of enactment, shall remain with the Department; and

"(B) stocks of feed materials which remain the property of the Department under paragraph (5) shall remain in place at the enrichment plant sites. The Corporation shall have access to and use of these feed materials provided such quantities as are used are replaced, or credit given, if use by the Department is subsequently needed.

"(6) all other facilities, equipment, materials, processes, patents, technical information of any kind, contracts, agreements, and leases to the extent these items concern the Corporation's functions and activities, except those items required for programs and activities of the Department and those items specifically excluded by this subsection.

The transfer authorized by this section is not subject to the requirements of section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act.

"b. The Secretary is authorized and directed to grant to the Corporation without charge the Department's rights and access to the Atomic Vapor Laser Isotope Separation, hereinafter referred to as 'AVLIS', technology and to provide on a reimbursable basis and at the request of the Corporation, the necessary cooperation and support of the Department to assure the commercial development and deployment of AVLIS or other technologies in a manner consistent with the intent of this title.

"c. The Secretary is authorized and directed to grant the Corporation without charge, to the extent necessary or appropriate for the conduct of the Corporation's activities, licenses to practice or have practiced any inventions or discoveries (whether patented or unpatented) together with the right to use or have used any processes and technical information owned or controlled by the Department.

"d. The Secretary is directed, without need of further appropriation, to transfer to the Corporation the unexpended balance of appropriations and other moneys available to the Department (inclusive of funds set aside for accounts payable), and accounts receivable which are related to functions and activities acquired by the Corporation from the Department pursuant to this title, including all advance payments.

"e. The President is authorized to provide for the transfer to the Corporation of the use, possession, and control of such other real and personal property of the United States which is reasonably related to the functions performed by the Corporation. Such transfers may be made by the President without charge as he may from time to time deem necessary and proper for achieving the purposes of this title.

"f. Title to depleted uranium resulting from the enrichment services provided to the Department by the Corporation shall remain with the Department.

"SEC. 1506. CAPITAL STRUCTURE OF THE CORPORATION.—

"a. Upon commencement of operations of the Corporation, all liabilities then chargeable to unexpended balances of appropriations transferred under section 1505 shall become liabilities of the Corporation.

"b. (1) The Corporation shall issue capital stock representing an equity investment equal to the book value of assets transferred to the Corporation, as reported in the Uranium Enrichment Annual Report for fiscal year 1987, modified to reflect continued depreciation and other usual changes that occur up to the date of transfer. The Secretary of the Treasury shall hold such stock for the United States: *Provided,* That all rights and duties pertaining to management of the Corporation shall remain vested in the Administrator as specified in section 1501.

"(2) The capital stock of the Corporation shall not be sold, transferred, or conveyed by the United States unless such disposition is specifically authorized by Federal law enacted after enactment of this title.

"c. The Corporation shall pay into miscellaneous receipts of the Treasury of the United States or such other fund as provided by law, dividends on the capital stock, out of earnings of the Corporation, as a return on the investment represented by such stock. The Corporation shall pay such dividends out of earnings, unless there is an overriding need to retain these funds in furtherance of other corporate functions including but not limited to research and development, capital investments, and establishment of cash reserves.

"d. The Corporation shall repay within a twenty-year period the amount of $364,000,000 into miscellaneous receipts of the Treasury of the United States, or such other fund as provided by law with interest on the unpaid balance from the date of enactment of this title at a rate equal to the average yield on twenty-year Government obligations as determined by the Secretary of the Treasury on the date of enactment of this title. The money required to be repaid under this subsection is hereinafter referred to as the 'Initial Debt'.

"e. Receipt by the United States of the stock issued by the Corporation (including all rights appurtenant thereto) together with repayment of the Initial Debt shall constitute the sole recovery by the United States of previously unrecovered costs that have been incurred by the United States for uranium enrichment activities prior to enactment of this title.

"SEC. 1507. BORROWING.—

"a. (1) The Corporation is authorized to issue and sell bonds, notes, and other evidences of indebtedness (hereinafter collectively referred to as "bonds") in an amount not exceeding $2,500,000,000 outstanding at any one time to assist in financing its activities and to refund such bonds. The principal of and interest on said bonds shall be payable from revenues of the Corporation.

"(2) Notwithstanding any other provision of law, the Corporation may pledge and use its revenues for payment of the principal of and interest on said bonds, for purchase or redemption thereof, and for other purposes incidental thereto, including creation of reserve funds and other funds which may be similarly pledged and used, to such extent and in such manner as it may deem necessary or desirable.

"(3) Notwithstanding any other provision of law, the Corporation is authorized to enter into binding covenants with the holders of said bonds—and with the trustee, if any—under any indenture, resolution, or other agreement entered into in connection with the issuance thereof with respect to the establishment of reserve funds and other funds, stipulations concerning the subsequent issuance of bonds, and such other matters, not inconsistent with this title, as the Corporation may deem necessary or desirable to enhance the marketability of said bonds.

"(4) Bonds issued by the Corporation hereunder shall not be obligations of, nor shall payments of the principal thereof or interest thereon be guaranteed by, the United States.

"b. Bonds issued by the Corporation under this section shall be negotiable instruments unless otherwise specified therein, shall be in such forms and denominations, shall be sold at such times and in such amounts, shall mature at such time or times not more than thirty years from their respective dates, shall be sold at such prices, shall bear such rates of interest, may be redeemable before maturity at the option of the Corporation in such manner and at such times and redemption premiums, may be entitled to such priorities of claim on the Corporation's revenues with respect to principal and interest payments, and shall be subject to such other terms and conditions, as the Corporation may determine: *Provided*, That at least fifteen days before selling each issue of bonds hereunder (exclusive of any commitment shorter than one year) the Corporation shall advise the Secretary of the Treasury as to the amount, proposed date of sale, maturities, terms and conditions and expected rates of interest of the proposed issue in the fullest detail possible. The Corporation shall not be subject to the provisions of section 9108 of title 31, United States Code. The Corporation shall be deemed part of an executive department or an independent establishment of the United States for purposes of the provisions of section 78c(c) of title 15, United States Code.

"c. Bonds issued by the Corporation hereunder shall be lawful investments and may be accepted as security for all fiduciary, trust, and public funds, the investment or deposit of which shall be under the authority or control of any officer or agency of the United States. The Secretary of the Treasury or any other officer or agency having authority over or control of any such fiduciary, trust, or public funds, may at any time sell any of the bonds of the Corporation acquired by them under this section: *Provided*, That the Corporation shall not issue or sell any bonds to the Federal Financing Bank.

"SEC. 1508. PRICING.—

"a. For purposes of maximizing the long-term economic value of the Corporation to the United States Government, the Corporation shall establish prices for its products, materials and services provided to customers other than the Department on a basis that will, over the long term, allow it to recover its costs for providing the products, materials and services; repay the Initial Debt; recover costs of decontamination, decommissioning and remedial action; and attain the normal business objectives of a profitmaking Corporation.

"b. The Corporation shall establish prices for low assay enrichment services and other products, materials, and services provided the Department on a basis that will allow it to recover its costs on a yearly basis for providing such low assay enrichment services, products, materials and services, including depreciation and the cost of decontamination, decommissioning and remedial action, but excluding repayment of the Initial Debt and profit. In establishing such prices, the base charge paid by the Department in any given year shall not exceed the average base charge paid by customers other than the Department: *Provided, however,* That if the imposition of such average base charges as a limitation on the base charge paid by the Department in a given year does not permit the Corporation to fully recover its costs for providing such products, materials and services to the Department then, in subsequent years, the Corporation shall include such unrecovered costs in its prices charged the Department. Base charge shall mean the amount paid by a customer per separative work unit for low assay enrichment services during a given year (exclusive of any credits received under a voluntary overfeeding program), less the portion of such amount which represents the cost of decontamination and decommissioning and remedial action. The average base charge paid by customers other than the Department shall be determined by dividing the estimated total dollar amount of low assay enrichment services sales to customers other than the Department during a given year by the estimated amount of separative work units sold to customers other than the Department during that year. Adjustments between estimated and actual amounts shall be made upon receipt of actual sales data.

"c. The Corporation shall establish prices to the Department for high assay enrichment services on a basis that will allow it to recover its costs, on a yearly basis, for providing the products, materials or services, including depreciation and the costs of decontamination, decommissioning, and remedial action concerning enrichment property, but excluding repayment of the Initial Debt and profit. If the Department does not request any enrichment services in a given year, the Department shall reimburse the Corporation for costs required to maintain the minimum level of operation of the high assay production facility.

"d. (1) In accordance with the cost responsibilities defined in paragraphs (3) and (4), the Corporation shall recover from its customers in the prices and charges established in accordance with subsection (a), amounts that will be sufficient to pay for the costs of decommissioning, decontamination and remedial action for the various property of the Corporation, including property transferred under section 1505a.

at any time. Such costs shall be based on the point in time that such decommissioning, decontamination and remedial action are to be undertaken and accomplished: *Provided,* That by the year 2000 the Corporation shall have recovered and deposited in the Uranium Enrichment Decontamination and Decommissioning Fund 50 per centum of the estimated total costs of decontamination and decommissioning of all property transferred or to be transferred to the Corporation under section 1505, including the Oak Ridge Gaseous Diffusion Plant.

"(2) In order to meet the objective defined in paragraph (1), the Corporation shall periodically estimate the anticipated or actual costs of decommissioning and decontamination. Such estimates shall reflect any changes in assumptions or expectations relevant to meeting such objective, including, but not limited to, any changes in applicable environmental requirements. Such estimates shall be reviewed at least every two years.

"(3) For purposes of enabling the Corporation to meet the objective defined in paragraph (1) with respect to the Oak Ridge Gaseous Diffusion Plant, the Secretary shall periodically estimate the anticipated costs of decontamination and decommissioning and the time at which such decontamination and decommissioning is to be accomplished. Such estimates shall reflect any changes in assumptions or expectations relevant to meeting such objective, including but not limited to, any changes in applicable environmental requirements. The Secretary shall review such estimates every two years and convey this information to the Corporation.

"(4) With respect to property that has been used in the production of low-assay separative work,

"(A) The costs of decommissioning, decontamination and remedial action that shall be recoverable from customers other than the Department in prices and charges shall be in the same ratio to the total costs of decommissioning, decontamination and remedial action for the property in question as the production of separative work over the life of such property for commercial customers bears to the total production of separative work over the life of such property.

"(B) All other costs of decommissioning, decontamination and remedial action for such property shall be recovered in prices and charges to the Department.

"(5) With respect to property that has been used solely in the production of high-assay separative work, all costs of decommissioning, decontamination and remedial action shall be recovered in prices and charges to the Department.

"SEC. 1509. AUDITS.—In fiscal years during which an audit is not performed by the Comptroller General in accordance with the provisions of section 9105 of title 31, United

States Code, the financial transactions of the Corporation shall be audited by an independent firm or firms of nationally recognized certified public accountants who shall prepare such audits using standards appropriate for commercial corporate transactions. The fiscal year of the Corporation shall conform to the fiscal year of the United States. The General Accounting Office shall review such audits annually, and to the extent necessary, cause there to be a further examination of the Corporation using standards for commercial corporate transactions. Such audits shall be conducted at the place or places where the accounts of the Corporation are established and maintained. All books, financial records, reports, files, papers, memoranda, and other property of, or in use by, the Corporation shall be made available to the person or persons authorized to conduct audits in accordance with the provisions of this section.

"Sec. 1510. Reports.—

"a. The Corporation shall prepare an annual report of its activities. This report shall contain—

"(1) a general description of the Corporation's operations;

"(2) a summary of the Corporation's operating and financial performance, including an explanation of the decision to pay or not pay dividends; and

"(3) copies of audit reports prepared in conformance with section 1509 of this title and the provisions of the Government Corporation Control Act, as amended.

"b. A copy of the annual report shall be provided to the President, the Secretary, the Committee on Energy and Natural Resources of the Senate, and the appropriate committees of the House of Representatives. Such reports shall be completed not later than ninety days following the close of each fiscal year and shall accurately reflect the financial position of the Corporation at fiscal year end, inclusive of any impairment of capital or ability of the Corporation to comply with the provisions of this title.

"SEC. 1511. CONTROL OF INFORMATION.—

"a. The term 'Commission' shall be deemed to include the Corporation wherever such terms appears in section 141 and subsections a. and b. of section 142 of title I.

"b. No contracts or arrangements shall be made, nor any contract continued in effect, under section 1401, 1402, 1403, or 1404, unless the person with whom such contract or arrangement is made, or the contractor or prospective contractor, agrees in writing not to permit any individual to have access to Restricted Data, as defined in section 11 y. of title I, until the Office of Personnel Management shall have made an investigation and report to the Corporation on the character, associations, and loyalty of such individual, and the Corporation shall have determined that permitting such person to have access to restricted data will not endanger the common defense and security.

"c. The restrictions detailed in subsections b., c., d., e., f., g., and h., of section 145 of title I shall be deemed to apply to the Corporation where they refer to the Commission or a majority of the members of the Commission, and to the Administrator where they refer to the General Manager.

"d. The Administrator shall keep the appropriate congressional committees fully and currently informed with respect to all of the Corporation's activities. To the extent consistent with the other provisions of this section, the Corporation shall make available to any of such committees all books, financial records, reports, files, papers, memoranda, or other information possessed by the Corporation upon receiving a request for such information from the chairman of such committee.

"e. Whenever the Corporation submits to the President, or the Office of Management and Budget, any budget, legislative recommendation, testimony, or comments on legislation, prepared for submission to the Congress, the Corporation shall concurrently transmit a copy thereof to the appropriate committees of Congress.

"f. The Corporation shall have no power to control or restrict the dissemination of information other than as granted by this or any other law.

"Sec. 1512. Patents and Inventions.—

"a. The term 'Commission' shall be deemed to include the Corporation wherever such term appears in section 152, 153 b.(1), and 158 of title I. The Corporation shall pay such royalty fees for patents licensed to it under section 153 b.(1) of title I as are paid by the Department under that provision. Nothing in title I or this title shall affect the right of the Corporation to require that patents granted on inventions, that have been conceived or first reduced to practice during the course of research or operations of, or financed by the Corporation, be assigned to the Corporation.

"b. The Department shall notify the Corporation of all reports heretofore or hereafter filed with it under subsection 151 c. of title I and all applications for patents heretofore or hereafter filed with the Commissioner of Patents of which the Department has notice under subsection 151 d. of title I or otherwise, whenever such reports or applications involve matters pertaining to the functions or responsibilities of the Corporation in accordance with this title. The Department shall make all such reports available to the Corporation, and the Commissioner of Patents shall provide the Corporation access to all such applications. All reports and applications to which access is so provided shall be kept in confidence by the Corporation, and no information concerning the same given without authority of the inventor or owner unless necessary to carry out the provisions of any Act of Congress.

"c. The Corporation, without regard for any of the conditions specified in paragraph 153 c.(1), (2), (3), or (4) of title I, may at any time make application to the Department for a patent license for the use of an invention or discovery useful in the production or utilization of special nuclear material or atomic energy covered by a patent when such patent has not been declared to be affected with the public interest under subsection 153 b.(1) of title I and when use of such patent is within the Corporation's authority. Any such application shall constitute an application under subsection 153 c. of title I subject, except as specified above, to all the provisions of subsections 153 c., d., e., f., g., and h., of title I.

"d. With respect to the Corporation's functions under this title, section 158 of title I shall be deemed to include the Corporation within the phrase, 'any other licensee' in the first sentence thereof and within the phrase 'such licensee' in the second sentence thereof.

"e. The Corporation shall not be liable directly or indirectly for any damages or financial responsibility with respect to secrecy orders imposed under sections 181 through 187 of title 35, United States Code.

"f. The Corporation shall not be liable or responsible for any payments made or awards under subsection 157 b.(3) of title I, or any settlements or judgments involving claims for alleged patent infringement except to the extent that any such awards, settlements or judgments are attributable to activities of the Corporation after the effective date of this title.

"g. The Corporation shall keep currently informed as to matters affecting its rights and responsibilities under chapter 13 of title I as modified by this section and shall take all appropriate action to avail itself of such rights and satisfy such responsibilities. The Department in discharging its responsibilities under chapter 13 of title I shall exercise diligence in informing the Corporation of matters affecting the responsibilities and jurisdiction of the Corporation and seeking and following as appropriate the advice and recommendation of the Corporation in such matters.

"CHAPTER 26. LICENSING, TAXATION, AND MISCELLANEOUS PROVISIONS

"SEC. 1601. LICENSING.—

"a. Notwithstanding any other provision of law, with respect solely to facilities, equipment and materials for activities related to the isotopic separation of uranium by the gaseous diffusion technology at facilities in existence as of the date of enactment of this title, the Corporation and its contractors are hereby exempted from the licensing requirements and prohibitions of sections 57, 62, 81 and other provisions of title I, to the same extent as the Department and its contractors are exempt in regard to the Department's own functions and activities. Such exemption shall remain in effect unless and until the Corporation and its contractors receive all necessary licenses for such facilities, equipment and materials as are required under title I.

"b. Within two years of the enactment of this title, the Commission shall promulgate regulations or issue other regulatory guidance under title I for the licensing of facilities described in subsection a. that employ the gaseous diffusion technology.

"c. Within one year after the promulgation of regulations or the issuance of other regulatory guidance under subsection b., the Corporation and its contractors shall make necessary applications for and otherwise seek to obtain such licenses as will remove the exemption provided under subsection a. As part of its application, the Corporation shall submit an Environmental Impact Statement in accordance with the requirements of the National Environmental Policy Act. The Commission shall adopt this statement to the extent practicable under the National Environmental Policy Act. In preparing such statement, the Corporation, and in making any licensing decision, the Commission, shall not consider the need for such facilities, alternatives to such facilities, or the costs compared to the benefits of such facilities. The Commission shall act on licensing requests by the Corporation in a timely manner.

"d. The Corporation shall not transfer or deliver any source, special nuclear or byproduct materials or production or utilization facilities, as defined in title I, to any person who is not properly qualified or licensed under the provisions of title I.

"e. The Corporation shall be subject to the regulatory jurisdiction of the Commission and the Department of Transportation with respect to the packaging and transportation of source, special nuclear and byproduct materials.

"SEC. 1602. EXEMPTION FROM TAXATION AND PAYMENTS IN LIEU OF TAXES.—

"a. In order to render financial assistance to those states and localities in which the facilities of the Corporation are located, the Corporation is authorized and directed to make payments to state and local governments as provided in this section. Such payments shall be in lieu of any and all state and local taxes on the real and personal property, activities and income of the Corporation. All property of the Corporation, its activities, and income are expressly exempted from taxation in any manner or form by any state, county, or other local government entity. The activities of the Corporation for this purpose shall include the activities of organizations pursuant to cost-type contracts with the Corporation to manage, operate and maintain its facilities. The income of the Corporation shall include income received by such organizations for the account of the Corporation. The income of the Corporation shall not include income received by such organizations for their own accounts, and such income shall not be exempt from taxation.

"b. The Corporation shall make annual payments, in amounts determined by the Corporation to be fair and reasonable, to the state and local governmental agencies having tax jurisdiction in any area where facilities of the Corporation are located. In making such determinations, the Corporation shall be guided by the following criteria:

"(1) Amounts paid shall not exceed the tax payments that would be made by a private industrial corporation owning similar facilities and engaged in similar activities at the same location: *Provided, however,* That there shall be excluded any amount that would be payable as a tax on net income.

"(2) The Corporation shall take into account the customs and practices prevailing in the area with respect to appraisal, assessment, and classification of industrial property and any special considerations extended to large-scale industrial operations.

"(3) No amount shall be included to the extent that any tax unfairly discriminates against the class of taxpayers of which the Corporation would be a member if it were a private industrial corporation, compared with other taxpayers or classes of taxpayers.

"(4) In no event shall the payment made to any taxing authority for any period be less than the payments which would have been made to such taxing authority for the same period by the Department and its cost-type contractors on behalf of the Department with respect to property that has been transferred to the Corporation under section 1505 and which would have been attributable to the ownership, management operation, and maintenance of the Department's uranium enrichment facilities, applying the laws and policies prevailing immediately to the enactment of this title.

"c. Payments shall be made by the Corporation at the time when payments of taxes by taxpayers to each taxing authority are due and payable: Provided, That no payment shall be made to the extent that the tax would apply to a period prior to the enactment of this title.

"d. The determination by the Corporation of the amounts due hereunder shall be final and conclusive.

"Sec. 1603. Miscellaneous Applicability of Title I.—

"a. Any references to the term 'Commission' or to the Department in sections 105 b., 110 a., 161 c., 161 k., 161 q., 165 a., 221 a., 229, 230 and 232 of title I shall be deemed to include the Corporation.

"b. Section 188 of title I shall apply to licensed facilities of the Corporation. For purposes of applying such section to facilities of the Corporation:

"(1) The term 'Commission' shall be deemed to refer to the Secretary;

"(2) There shall be no requirement for payment of just compensation to the Corporation, and receipts from operation of the facility in question shall continue to accrue to the benefit of the Corporation; and

"(3) The Secretary shall have the discretion to determine how and by whom the facility in question will be operated.

"SEC. 1604. COOPERATION WITH OTHER AGENCIES.—The Corporation is empowered to use with their consent the available services, equipment, personnel, and facilities of other civilian or military agencies and instrumentalities of the Federal Government, on a reimbursable basis and on a similar basis to cooperate with such other agencies and instrumentalities in the establishment and use of services, equipment, and facilities of the Corporation. Further, the Corporation may confer with and avail itself of the cooperation, services, records, and facilities of State, territorial, municipal or other local agencies.

"Sec. 1605. Applicability of Antitrust Laws.—

"a. The Corporation shall conduct its activities in a manner consistent with the policies expressed in the antitrust laws, except as required by the public interest.

"b. As used in this subsection, the term 'antitrust laws' means:

"(1) The Act entitled: 'An Act to protect trade and commerce against unlawful restraints and monopolies,' approved July 2, 1890 (15 U.S.C. 1–7), as amended;

"(2) The Act entitled, 'An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes,' approved October 15, 1914 (15 U.S.C. 12–27), as amended;

"(3) Sections 73 and 74 of the Act entitled, 'An Act to reduce taxation, to provide revenue for the Government, and for other purposes,' approved August 27, 1894 (15 U.S.C. 8–9), as amended; and

"(4) The Act of June 19, 1936, chapter 592 (15 U.S.C. 13, 13a, 13b, and 21a).

"Sec. 1606. Nuclear Hazard Indemnification.—The Administrator shall have the same authority to indemnify the contractors of the Corporation as the Secretary has to indemnify contractors under section 170 d. of title I. Except that with respect to any licenses issued to the Corporation by the Commission, the Commission shall treat the Corporation and its contractors as its licensees for the purposes of Section 170 of this Act.

"SEC. 1607. INTENT.—It is hereby declared to be the intent of this title to aid the Corporation in discharging its responsibilities under this title by providing it with adequate authority and administrative flexibility to obtain necessary funds with which to assure the maximum achievement of the purposes hereof as provided herein, and this title shall be construed liberally to effectuate such intent.

"SEC. 1608. REPORT.—

"a. Three years after enactment of this title or January, 1993, whichever is later, the Administrator shall submit to the President and to Congress an interim report setting forth the views and recommendations of the Administrator regarding transfer of the functions, powers, duties, and assets of the Corporation to private ownership. Five years after enactment of this title, the Administrator shall submit to the President and the Congress a final report setting forth the views and recommendations of the Administrator regarding transfer of the functions, powers, duties, and assets of the Corporation to private ownership. If the Administrator, in the final report, recommends such transfers, the report shall include a plan for implementation of the transfers.

"b. Within one hundred and eighty days after receipt of the final report under subsection a., the President shall transmit to Congress his recommendations regarding the report, including a plan for implementation of any transfers recommended by the President and any recommendations for legislation necessary to effectuate such transfers.

"CHAPTER 27. DECONTAMINATION AND DECOMMISSIONING

"SEC. 1701. ESTABLISHMENT.

"a. ESTABLISHMENT OF FUND.—(1) There is hereby established in the Treasury of the United States an account of the Corporation to be known as the Uranium Enrichment Decontamination and Decommissioning Fund (hereinafter referred to in this chapter as the 'Fund'). In accordance with section 1402 j., such account and any funds deposited therein, shall be available to the Corporation for the exclusive purpose of carrying out the purposes of this chapter.

"(2) The Fund shall consist of:

"(A) Amounts paid into it by the Corporation in accordance with section 1702; and

"(B) Any interest earned under subsection b.(2).

"b. ADMINISTRATION OF FUND.—(1) The Secretary of the Treasury shall hold the Fund and, after consultation with the Corporation, annually report to the Congress on the financial condition and operations of the Fund during the preceding fiscal year.

"(2) At the direction of the Corporation, the Secretary of the Treasury shall invest amounts contained within such Fund in obligations of the United States:

"(A) Having maturities determined by the Secretary of the Treasury to be appropriate to the needs of the Fund, as determined by the Corporation; and

"(B) Bearing interest at rates determined to be appropriate by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States with remaining periods to maturity comparable to such obligations.

"(3) At the request of the Corporation, the Secretary of the Treasury shall sell such obligations and credit the proceeds to the Fund.

"SEC. 1702. DEPOSITS.

"Within sixty days of the end of each fiscal year, the Corporation shall make a payment into the Fund in an amount equal to the costs of decontamination and decommissioning that have been recovered during such fiscal year by the Corporation in its prices and charges established in accordance with section 1508 for products, materials, and services.

"SEC. 1703. PERFORMANCE AND DISBURSEMENTS.

"a. When the Corporation determines that particular property should be decommissioned or decontaminated, or both, or with respect to the Oak Ridge Gaseous Diffusion Plant at such time as the plant is conveyed to the Corporation, the Corporation shall enter into a contract for the performance of such decommissioning and decontamination.

"b. The Corporation shall pay for the costs of such decommissioning and decontamination out of amounts contained within the Fund.".

SEC. 14004. TREATMENT OF THE CORPORATION AS BEING PRIVATELY-OWNED FOR PURPOSES OF THE APPLICABILITY OF ENVIRONMENTAL AND OCCUPATIONAL SAFETY LAWS.—The United States Enrichment Corporation shall be subject to Federal, State and local environmental laws and the Occupational Safety and Health Act (29 U.S.C. 651–678) to the same extent as is the Department of Energy as of the date of enactment. After four years from the date of enactment of this subtitle, the United States Enrichment Corporation shall become subject to such laws to the same extent as a privately-owned corporation, unless the President determines that additional time is necessary to achieve the purposes of title II of the Atomic Energy Act of 1954, as amended.

SEC. 14005. MISCELLANEOUS PROVISIONS.—(a) Section 9101(3) of title 31, United States Code (relating to the definition of "wholly-owned Government corporation") is amended by adding at the end the following: "(N) United States Enrichment Corporation.".

(b) In subsection 41 a. of the Atomic Energy Act of 1954, as amended, the word "or" appearing before the numeral "(2)" is deleted, a semicolon is substituted for a period at the end of the subsection and the following new paragraph is added: "or (3) are owned by the United States Enrichment Corporation.".

(c) In subsection 53 c. (1) of the Atomic Energy Act of 1954, as amended, the word "or" is inserted before the word "grant" and the phrase "or through the provision of production or enrichment services" is deleted in both places where it appears in such subsection.

(d) The Atomic Energy Act of 1954, as amended, is further amended in section 318(1) by striking the period after "activities" and by adding the following:

"(D) any facility owned by the United States Enrichment Corporation.".

(e) Subsection 905(g)(1) of title 2, United States Code, is amended to include "United States Enrichment Corporation" at the end thereof.

(f) Section 306 of title III of the Energy and Water Development Appropriations Act, 1988, Public Law 100–202, is repealed.

SEC. 14006. LIMITATION ON EXPENDITURES.—For fiscal year 1991, total expenditures of the United States Enrichment Corporation shall not exceed total receipts.

SEC. 14007. SEVERABILITY.—If any provision of this subtitle, or the application of any provision to any entity, person or circumstance, shall for any reason be adjudged by a court of component jurisdiction to be invalid, the remainder of this title, or the application of the same shall not be thereby affected.

SEC. 14008. EFFECTIVE DATE.—Except as otherwise provided, all provisions of this subtitle shall take effect on the day following the end of the first full fiscal year quarter following the enactment of this title: *Provided, however*, That the Administrator or Acting Administrator of the United States Enrichment Corporation may immediately exercise the management responsibilities and powers of subsection 1501 a. of the Atomic Energy Act of 1954, as amended by this title and previous Acts.

Subtitle B—Uranium

PART 1—SHORT TITLE, FINDINGS AND PURPOSE, DEFINITIONS

SEC. 14101. SHORT TITLE.

This subtitle may be cited as the "Uranium Security and Tailings Reclamation Act of 1991."

SEC. 14102. FINDINGS AND PURPOSE.

(a) FINDINGS.—The Congress finds for purposes of this subtitle that—

(1) the United States uranium industry has long been recognized as vital to United States energy independence and as essential to United States national security, but has suffered a drastic economic setback, including a 90 per centum reduction in employment, closure of almost all mines and mills, more than a 75 per centum drop in production, and a permanent loss of uranium reserves;

(2) during the remainder of this century approximately 20 per centum of United States electricity is expected to be produced from uranium fueled powerplants owned by domestic electric utilities;

(3) the United States has been the leading uranium producing nation and holds extensive proven reserves of natural uranium that offer the potential for secure sources of future supply;

(4) a variety of economic factors, policies of foreign governments, foreign export practices, the discovery and development of low cost foreign reserves, new Federal regulatory requirements, and cancellation of nuclear powerplants have caused most United States producers to close or suspend operations over the past six years and have resulted in the domestic uranium industry being found "not viable" by the Secretary under provisions of the Atomic Energy Act of 1954, as amended;

(5) providing assistance to the domestic uranium industry is essential to—

(A) preclude an undue threat from foreign supply disruptions that could hinder the Nation's common defense and security,

(B) assure an adequate long-term supply of domestic uranium for the Nation's nuclear power program to preclude an undue threat from foreign supply disruptions or price controls, and

(C) aid in the Nation's balance-of-trade payments through foreign sales;

(6) the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901–7942)—

(A) was enacted to provide for the reclamation and regulation of uranium and thorium mill tailings; and

(B) did not provide for a Federal contribution for the reclamation of tailings at uranium and thorium processing sites which were generated pursuant to Federal defense contracts;

(7) the owners or licensees of active uranium and thorium sites and the Federal Government have each benefited from uranium and thorium produced at the active sites, and it is equitable that they share in the costs of reclamation, decommissioning and other remedial actions at the commingled sites; and,

(8) the creation of an assured system of financing will greatly facilitate and expedite reclamation and remedial actions at active uranium and thorium processing sites.

(b) PURPOSE.—It is the purpose of parts 2 and 3 of this subtitle to—

(1) ensure an adequate long-term supply of domestic uranium for the Nation's common defense and security and for the Nation's nuclear power program;

(2) provide assistance to the domestic uranium industry; and

(3) establish, facilitate, and expedite a comprehensive system for financing reclamation and other remedial action at active uranium and thorium processing sites.

SEC. 14103. DEFINITIONS.

For purposes of this subtitle—

(1) the term "active site" means—

(A) any uranium or thorium processing site, including the mill, containing by-product material for which a license (issued by the Nuclear Regulatory Commission or its predecessor agency under the Atomic Energy Act of 1954, as amended, or by a State as permitted under section 274 of such Act (42 U.S.C. 2021)) for the production at such site of any uranium or thorium derived from ore—

(i) was in effect on January 1, 1978;

(ii) was issued or renewed after January 1, 1978; or

(iii) for which an application for renewal or issuance was pending on, or after January 1, 1978; and

(B) any other real property or improvement on such real property that is determined by the Commission to be—

(i) in the vicinity of such site; and

(ii) contaminated with residual by-product material;

(2) the term "byproduct material" has the meaning given such term in section 11e.(2) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014(e)(2));

(3) the term "civilian nuclear power reactor" means any civilian nuclear powerplant required to be licensed under section 103 or section 104 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2133);

(4) the term "Corporation" means the United States Enrichment Corporation established under section 1202 of Title II of the Atomic Energy Act of 1954, as amended;

(5) the term "Department" means the Department of Energy;

(6) the term "domestic uranium" means any uranium that has been mined in the United States including uranium recovered from uranium deposits in the United States by underground mining, open-pit mining, strip mining, in situ recovery, leaching, and ion recovery, or recovered from phosphoric acid manufactured in the United States;

(7) the term "domestic uranium producer" means a person or entity who produces domestic uranium and who has, to the extent required by State and Federal agencies having jurisdiction, licenses and permits for the operation, decontamination, decommissioning, and reclamation of sites, structures and equipment;

(8) the term "enrichment tails" means uranium in which the quantity of the U^{235} isotope has been depleted in the enrichment process;

(9) the term "reclamation, decommissioning, and other remedial action" includes work, including but not limited to disposal work, accomplished in order to comply with all applicable requirements, including but not limited to those established pursuant to the Uranium Mill Tailings Radiation Control Act of 1978, as amended, or where appropriate, with requirements established by a State that is a party to a discontinuance agreement under section 274 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2021). The term shall also include work at an active site prior to the date of enactment of this act accomplished in order to comply with the foregoing requirements;

(10) the term "Secretary" means the Secretary of Energy;

(11) the terms "source material" and "special nuclear material" have the meaning given such terms in section 11 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014); and

(12) the term "tailings" means the wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

PART 2—URANIUM REVITALIZATION

SEC. 14111. VOLUNTARY OVERFEED PROGRAM.

(a) The Corporation shall establish, for a period of not less than five years commencing at the beginning of fiscal year 1992, a voluntary overfeeding program which shall be made available to the Corporation's enrichment services customers. The term "overfeeding" means the use of uranium in the enrichment process in excess of the amount required at the transactional tails assay.

(b) The Corporation shall encourage its enrichment services customers to participate in the voluntary overfeeding program as provided in this section. Uranium supplied by the enrichment customer shall be used by the Corporation for voluntary overfeeding in the enrichment process to reduce the amount of power required to produce the enriched uranium ordered by the enrichment services customer. The dollar savings resulting from the reduced power requirements shall be credited to the enrichment services customer.

(c) In the event an enrichment services customer does not elect to provide uranium for voluntary overfeeding to be used to process its enrichment order, the Corporation shall establish a method for such uranium to be voluntarily supplied by other enrichment services customer(s) which have expressed to the Corporation an interest in participating in such a program and the Corporation shall credit the resulting dollar savings realized from the reduced power requirements to the enrichment services customer(s) providing the uranium.

(d) An enrichment services customer providing uranium for voluntary overfeeding shall certify to the Corporation that such uranium is domestic uranium which has been actually produced by a domestic uranium producer after the enactment of this title or domestic uranium actually produced by a domestic uranium producer before the enactment of this title and held by it without sale, transfer, or redesignation, of the origin of such uranium on a DOE/NRC form 741.

(e) Within ninety days of the date of enactment of this title, the Corporation shall establish procedures to implement this program. Such procedures shall include, but not be limited to, delivery, reporting, and certification requirements, and provisions for failure to comply with the requirements of the voluntary overfeeding program. The determination of the voluntary overfeeding credit and sufficient data to support such determination shall be available to the Corporation's enrichment services customers and to qualified domestic producers.

SEC. 14112. NATIONAL STRATEGIC URANIUM RESERVE.

There is hereby established the National Strategic Uranium Reserve under the direction and control of the Secretary. The reserve shall consist of fifty million pounds of natural uranium contained in stockpiles or inventories currently held by the United States for defense purposes. Effective on the date of enactment of this title, use of the reserve shall be restricted to military purposes and Government research. Use of the Department's stockpile of enrichment tails existing on the date of enactment of this title shall be restricted to military purposes.

SEC. 14113. RESPONSIBILITY FOR THE INDUSTRY.

(a) The Secretary shall have a continuing responsibility for the domestic uranium industry, and shall take any action, which he determines to be appropriate under existing law, to encourage the use of domestic uranium: *Provided, however,* That the Secretary, in fulfilling this responsibility, shall not use any supervisory authority over the Corporation. The Secretary shall report annually to the appropriate committees of Congress on action taken with respect to the domestic uranium industry, including action to promote the export of domestic uranium pursuant to subsection (b).

(b) ENCOURAGE EXPORT.—The Department, with the cooperation of the Department of Commerce, the United States Trade Representative, and other governmental organizations, shall encourage the export of domestic uranium. Within one hundred and eighty days of the date of enactment of this Act the Secretary shall develop recommendations and implement Government programs to promote the export of domestic uranium.

SEC. 14114. GOVERNMENT URANIUM PURCHASES.

(a) After the date of enactment of this title, the United States of America, its agencies and instrumentalities, shall only have the authority to enter into contracts or orders for the purchase of uranium which is (1) of domestic origin and (2) is purchased from domestic uranium producers: *Provided,* That this section shall not affect purchases under a contract for delivery of a fixed amount of uranium entered into before the date of enactment of this title.

(b) Subsection (a) shall not apply to the Tennessee Valley Authority.

SEC. 14115. SECRETARY'S AUTHORITY TO MAKE REGULATIONS.

The Secretary shall issue appropriate regulations to implement the purposes of this subtitle.

PART 3—REMEDIAL ACTION FOR ACTIVE PROCESSING SITES

SEC. 14121. REMEDIAL ACTION PROGRAM.

(a) IN GENERAL.—Except as provided in subsection (b), the costs of decontamination, decommissioning, reclamation, and other remedial action at an active uranium or thorium processing site shall be borne by persons licensed under section 62 or 81 of the Atomic Energy Act of 1954 (42 U.S.C. 2091, 2111) for any activity at such site which results or has resulted in the production of byproduct material.

(b) REIMBURSEMENT.—

(1) IN GENERAL.—The Secretary shall, subject to paragraph (2), reimburse at least annually a licensee described in subsection (a) for such portion of the reclamation, decommissioning, and other remedial action costs described in such subsection as are—

(A) determined by the Secretary to be attributable to tailings generated as an incident of sales to the United States; and

(B) incurred by such licensee not later than December 31, 2002.

(2) AMOUNT.—

(A) TO INDIVIDUAL ACTIVE SITE URANIUM LICENSEES.—The amount of reimbursement paid to any licensee under paragraph (1) shall be determined by the Secretary in accordance with regulations issued pursuant to section 14122 and shall not exceed an amount equal to $4.50 multiplied by the dry short tons of tailings located at the site as of the effective date of this subtitle and generated as an incident of sales to the United States.

(B) To all active site uranium licensees.—Payments made under paragraph (1) to active site uranium licensees shall not in the aggregate exceed $270,000,000.

(C) To thorium licensees.—Payments made under paragraph (1) to the licensee of the active thorium site shall not exceed $30,000,000.

(D) Inflation escalation index.—The amounts in subparagraphs (A), (B) and (C) shall be increased annually based upon an inflation index. The Secretary shall determine the appropriate index to apply.

(E) Additional reimbursement.—*Provided however,* That (i) the Secretary shall determine as of July 31, 2005, whether the amount authorized to be appropriated in section 14123, when considered with the $4.50 per dry short ton limit on reimbursement, exceeds the total cost reimbursable to the licensees of active sites for reclamation, decommissioning and other remedial action; and (ii) if the Secretary determines there is an excess, the Secretary may allow reimbursement in excess of $4.50 per dry short ton on a pro-rated basis at such sites that reclamation, decommissioning and other remedial action costs for tailings generated as an incident of sales to the United States exceed the $4.50 per dry short ton limitation.

SEC. 14122. REGULATIONS.

The Secretary shall issue regulations governing reimbursement under section 14121. An active uranium or thorium processing site owner shall apply for reimbursement hereunder by submitting a statement for the amount of reimbursement, together with reasonable documentation in support thereof, to the Secretary. Any such statement for reimbursement, supported by reasonable documentation, shall be approved by the Secretary and reimbursement therefor shall be made in a timely manner subject only to the limitations of section 14121.

SEC. 14123. AUTHORIZATION.

There is authorized to be appropriated for purposes of this part not more than $300,000,000 increased annually as provided in section 14121 based upon an inflation index as determined by the Secretary.

TITLE XV.—PUBLIC UTILITY HOLDING COMPANY ACT REFORM

SEC. 15001. EXEMPT WHOLESALE GENERATORS.

(a)(1) "Exempt wholesale generator" shall mean any person who is engaged directly, or indirectly through one or more affiliates of such person as defined under section 2(a)(11)(B) of the Public Utility Holding Company Act of 1935, exclusively in the business of owning or operating all or part of one or more eligible facilities and selling electric energy at wholesale: *Provided*, That the term "exempt wholesale generator" shall exclude an affiliate of a registered holding company, which affiliate was in existence as of the date of enactment of this title, unless the Commission has consented.

(2) "Eligible facility" shall mean a facility, wheresoever located, used for the generation of electric energy exclusively for sale at wholesale (including inter-connecting transmission facilities necessary to effect such sale at wholesale), but shall exclude any facility for which consent is required under paragraph (3) and has not been obtained. For purposes of this subsection, the term "facility" shall include a portion of a facility.

(3) As of the date of enactment of this title, if a rate or charge for, or in connection with, the construction of a facility, or for electric energy produced by a facility (other than

any portion of a rate or charge which represents recovery of the cost of a wholesale rate or charge) was in effect under the laws of any State, consent with respect to such facility shall be required from any State commission having jurisdiction over such rate or charge.

(b) An exempt wholesale generator shall not be considered an "electric utility company" under section 2(a)(3) of the Act and, whether or not a subsidiary company, an affiliate, or an associate company of a holding company, shall be exempt from all provisions of the Act.

(c) Notwithstanding any provision of the Act, a holding company that is exempt under section 3 of the Act shall be permitted without condition or limitation under such Act to acquire and maintain an interest in the business of one or more exempt wholesale generators.

(d) Notwithstanding any provision of the Act and the Commission's jurisdiction as provided under subsection (e), a registered holding company shall be permitted without the need to apply for, or receive approval from the Commission, and otherwise without condition under the Act, to acquire and hold the securities, or an interest in the business, of one or more exempt wholesale generators.

(e) The issuance of securities by a registered holding company for purposes of financing the acquisition of an exempt wholesale generator, the guarantee of securities of an exempt wholesale generator by a registered holding company, the entering into service, sales or construction contracts, and the creation or maintenance of any other relationship in addition to that described in subsection (d) between an exempt wholesale generator and a registered holding company, its affiliates and associate companies, shall remain subject to the jurisdiction of the Commission under the Act: *Provided*, That—

(1) Section 11 of the Act shall not prohibit the ownership of an interest in the business of one or more exempt wholesale generators by a registered holding company (regardless of where facilities owned or operated by such exempt wholesale generators are located), and such ownership by a registered holding company shall be deemed consistent with the operation of an integrated public utility system; and

(2) The ownership of an interest in the business of one or more exempt wholesale generators by a registered holding company (regardless of where facilities owned or operated by such exempt wholesale generators are located) shall be considered as reasonably incidental, or economically necessary or appropriate to the operations of an integrated public utility system.

SEC. 15002. OWNERSHIP OF EXEMPT WHOLESALE GENERATORS AND QUALIFYING FACILITIES.

The ownership by a person of one or more exempt wholesale generators shall not result in such person being considered as being primarily engaged in the generation or sale of electric power within the meaning of sections 3(17)(C)(ii) and 3(18)(B)(ii) of the Federal Power Act, as amended.

SEC. 15003. ELECTION TO AVOID PURCHASE FROM OR OWNERSHIP OF EWGS.

(a) An electric utility company that intends to avoid purchasing electric energy from exempt wholesale generators may file a declaration of this intent with the Federal Energy Regulatory Commission in such form as such commission may prescribe. Such declaration shall specify a period of no longer than ten years during which such declaration shall remain in effect and shall be irrevocable during the period specified. An electric utility company may file such a declaration from time to time as it finds desirable.

(b) Upon the filing of a declaration under subsection (a), the electric utility company making the filing shall, without the need for action by the Federal Energy Regulatory Commission or any other body, be prohibited from purchasing electric energy from any exempt wholesale generator during the period specified in the declaration.

(c) No State commission shall impose any penalty, directly or indirectly, through exercise of ratemaking authority or otherwise, upon an electric utility company or an affiliate or associate company thereof, on account of the filing of a declaration as provided under subsection (a), either in advance of such filing or subsequently.

(d) Notwithstanding any other provision of this title, no electric utility company that has filed a declaration under subsection (a), nor any affiliate or associate company thereof, shall acquire or own an interest in the business of an exempt wholesale generator during the period in which such declaration remains in effect. Nor shall any such electric utility company, or affiliate or associate company thereof, make any offer, during the period in which such declaration remains in effect, to sell electric energy from an exempt wholesale generator in whose business it would acquire or own an interest after such declaration expires.

(e)(1) Any violation of the prohibitions of this section shall be deemed to constitute a violation of the Federal Power Act, as amended, and the provisions of such Act shall apply to the enforcement, and imposition of penalties for violations, of the prohibitions of this section.

(2) For purposes of the enforcement of the prohibitions of this section, a State commission shall be deemed to be a

person under section 314 of the Federal Power Act, as amended.

SEC. 15004. PRESERVATION OF STATE AUTHORITY.

Except as provided in section 15003, nothing in this title shall preempt or otherwise restrict such power as a State commission may have, in accordance with State and Federal law and in the absence of the enactment of this title, to judge the prudence of a purchase of electric energy at wholesale, allow or disallow the inclusion of the cost of such a purchase in rates subject to such commission's jurisdiction, or otherwise exercise its functions.

SEC. 15005. REFERENCES TO THE PUBLIC UTILITY HOLDING COMPANY ACT OF 1935.

For purposes of this title, all references to "the Act" shall mean the Public Utility Holding Company Act of 1935, as amended. All of the terms used in this title and defined in the Public Utility Holding Company Act of 1935 shall have the same meaning as defined therein.

THE SECRETARY OF ENERGY,
Washington, DC, March 4, 1991.

Hon. DAN QUAYLE,
President of the Senate, Washington, DC.

DEAR MR. PRESIDENT: On February 20, I was privileged to be with the President when he presented to the American people the National Energy Strategy.

The National Energy Strategy is not merely a statement of policy. It is a Strategy of shared responsibility among industry, government, science and the American people. Many of the elements of the National Energy Strategy can be accomplished without additional Federal legislation through administrative reform, private initiative or State and local action. Some of the National Energy Strategy initiatives, on the other hand, will require the enactment of legislation.

I am enclosing, on behalf of the Administration, the non-tax legislative component of the National Energy Strategy. This comprehensive bill is cited as the "National Energy Strategy Act." Its enactment would be in accord with the President's legislative program. Under separate cover I also am forwarding complementary legislation implementing the tax portion of the energy strategy, the "National Energy Strategy Tax Act".

Title I of the bill deals with energy efficiency in the residential, commercial, and Federal sectors of the economy. It would authorize the development of energy efficiency test procedures and labeling for electric-lights and a number of commercial products so that consumers can make informed choices. It also would permit Federal agencies to take advantage of utility discounts and rebates, just as other electricity consumers do.

Increasing use of our ample supplies of natural gas is an important component of lessening the country's dependence on oil. Several proposals are included in title II to make it easier for natural gas to get from the producer to the consumer, primarily streamlining regulatory processes to expedite construction of new natural gas pipelines and by encouraging commercial agreements without the imposition of regulatory decision or approval.

Also in title II is a proposal to establish a Natural Gas and Electricity Administration within the Department of Energy to replace the Federal Energy Regulatory Commission. This proposal was developed independently of the National Energy Strategy by the Vice President's Council on Competitiveness. It is included here because it complements the reform and streamlining of the regulatory infrastructure for the natural gas and hydroelectric power industries contained in the National Energy Strategy.

To help secure future energy supplies, title III of the bill would authorize Arctic Coastal plain leasing under strictly controlled conditions. The bill provides that all of the revenues from leasing would be deposited in the miscellaneous receipts account of the Treasury, consistent with the President's National Energy Strategy and FY 1992 budget. The Administration recognizes that other legislation in Congress would authorize 50-50 receipt sharing with the State of Alaska. Alaska officials are proposing even more favorable terms for the State. We plan to work with Congress to resolve this issue in a manner that is fair to the Citizens of Alaska.

Other proposals to stimulate efficient oil production and transportation include the leasing of the Naval Petroleum Reserves and oil pipeline deregulation. The leasing proposal has been modified from one submitted to the 101st Congress so that the State of California would now share in the revenues. The oil pipeline deregulation proposal is similar to the one submitted to the last Congress.

Electricity generation and use is the subject of title IV, which includes reform of the Public Utility Holding Company Act to eliminate barriers to investment, and Power Marketing Administration repayment reform. Regulatory structures that were appropriate in the 1930's are no longer appropriate. Removing them will stimulate competition in the electric power industry.

In order to meet expected growth in electricity demand, we must revitalize the nuclear power option in this country. Two current impediments are the licensing process and lack of progress in nuclear waste disposal management. Title V of the bill provides solutions to these problems.

Increasing renewable energy production and consumption is another vital element of a balanced approach to energy. Permanently removing size caps that limit benefits to renewable generation units under the Public Utility Regulatory Policies Act is proposed in title VI. Also, improvements in the hydropower licensing and relicensing process are included in the bill, aimed primarily at maintaining and enhancing hydroelectric power production at existing facilities.

For the transportation sector, the Administration is proposing in title VII a very strong stimulus to the use of alternative fuels by requiring automobiles and truck fleets to procure specified percentages of alternatively-fueled vehicles beginning in 1995. We also have included repeal of a cap on Corporate Average Fuel Economy (CAFE) credits for the manufacture of dual and flexible fuel vehicles.

Finally, in title VIII, the Administration is proposing legislation to strengthen America's competitive posture. Title VIII contains important copyright protection for computer software developments in Government-owned, contractor-operated facilities. his proposal, when coupled with the research and energy investment tax credit proposals being forwarded separately, and with product liability legislation, will help stimulate industrial innovation.

This package, together with the many elements of the National Energy Strategy not requiring legislation, provides an extremely ambitious, balanced blueprint for our energy future. Achieving a national consensus in support of the Strategy and implementing legislation will be critical to achieving our energy, environmental and economic goals. We in the Administration very much look forward to working with you and your colleagues in the Congress on early enactment of responsible, balanced energy legislation. We owe the American people, whom we all serve, no less.

Sincerely,

JAMES D. WATKINS,
Admiral, U.S. Navy (Retired).

II

102D CONGRESS
1ST SESSION

S. 570

To implement the National Energy Strategy, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 6 (legislative day, FEBRUARY 6), 1991

Mr. JOHNSTON (for himself and Mr. WALLOP) (by request) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To implement the National Energy Strategy, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "National Energy Strategy Act".

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TITLE I—RESIDENTIAL, COMMERCIAL, AND FEDERAL ENERGY USE

Subtitle A—Consumer and Commercial Products

DEFINITIONS

SEC. 101. Section 321(a) of the Energy Policy and Conservation Act (42 U.S.C. 6291(a)) is amended—

(1) in paragraph (1) by inserting "electric lights and" after "includes";

(2) in paragraph (2) by inserting "commercial or" before "consumer";

(3) in paragraphs (4), (5), (7), (12), (13), (14), and (15) by striking "consumer" wherever it appears and inserting "covered" in its place;

(4) in paragraph (6)(A) by striking "covered" and inserting "consumer" in its place;

(5) in paragraph (27) by inserting ", other than a commercial water heater," after "product"; and

(6) by adding "(30) The term "commercial product" means an article which, to any significant extent, is distributed in commerce for commercial use." after paragraph (29).

COVERAGE

SEC. 102. Section 322 of the Energy Policy and Conservation Act (42 U.S.C. 6292) is amended—

(1) in subsection (a)—

(A) by striking "IN GENERAL" and inserting "CONSUMER PRODUCTS" in its place;

(B) by redesignating paragraph "(14)" as paragraph "(15)"; and

(C) by inserting "(14) Electric lights." after paragraph (13); and

(2) by adding the following subsection:

"(c) COMMERCIAL PRODUCTS.—The following commercial products are covered products:

"(1) Commercial space heating equipment.

"(2) Commercial space cooling equipment.

"(3) Commercial ventilation equipment.

"(4) Commercial water heaters.

"(5) Commercial refrigeration equipment.

"(6) Electric motors less than 25 horsepower.

"(7) Office equipment.".

TEST PROCEDURES

SEC. 103. Section 323(b)(1)(B) of the Energy Policy and Conservation Act (42 U.S.C. 6293(b)(1)(B)) is amended—

(1) by inserting "commercial or" before "consumer"; and

(2) by striking "322(b)" and inserting "322 (a)(14), (b), or (c)".

LABELING

SEC. 104. Section 324 of the Energy Policy and Conservation Act (42 U.S.C. 6294) is amended—

(1) in subsection (a)(2) by adding the following subparagraph after subparagraph (B):

"(C) The Commission shall prescribe labeling rules under this section applicable to covered products specified in section 322 (a)(14) or (c), except for a class of covered products for which the Commission determines—

"(i) under the second sentence of section 324(b)(5), labeling in accordance with this section is not technologically or economically feasible, or

"(ii) labeling in accordance with this section is not preferable to alternative approaches, including voluntary labeling programs, considering the benefits, burdens, and reliability of information of both approaches."; and

(2) in sections 324 (a)(3), (b)(1)(B), (b)(3), and (b)(5) by striking "(14)" wherever it appears and inserting "(15)" in its place.

ENERGY CONSERVATION STANDARDS

SEC. 105. Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended—

(1) in subsection (a)(2) by striking "covered" and inserting "consumer" in its place;

(2) in subsection (i) by striking "(14)" wherever it appears and inserting "(15)" in its place; and

(3) by adding the following subsection:

"(r) ELECTRIC LIGHTS AND COMMERCIAL PRODUCTS.—The Secretary shall not prescribe energy conservation standards for electric lights or a commercial product specified in section 322(c).".

CONFORMING AMENDMENT

SEC. 106. The catchline for part B, title III of the Energy Policy and Conservation Act is amended by inserting "Commercial and" before "Consumer".

Subtitle B—Federal Energy Management Utility Incentive Programs

SEC. 111. Part 3 of Title V of the National Energy Conservation Policy Act (42 U.S.C. 8251–8259) is amended by adding the following after section 549—

"SEC. 550. UTILITY INCENTIVE PROGRAMS.—Notwithstanding any other law, an agency may participate in any program conducted by a gas or electric utility for the management of energy demand or for the application of energy conservation measures to Federal buildings and may accept, retain, and use, without further appropriations, any financial incentive available from a gas or electric utility for the management of energy demand or for the application of energy conservation measures. Any cash incentive received from a gas or electric utility shall be credited to the same appropriations account from which an agency has paid, or is authorized to pay, funds needed to participate in the utility program.".

TITLE II—NATURAL GAS

Subtitle A—Natural Gas Pipeline Regulatory Reform

Gas Delivery Interconnection

SEC. 201. Section 7(a) of the Natural Gas Act (15 U.S.C. 717f(a)) is amended to read as follows—

"(a)(1) Whenever the Commission, after notice and opportunity for hearing, finds such action necessary or desirable in the public interest, it may by order direct a natural-gas company or a person who has constructed, extended, or acquired, or is operating a facility under section 7(k) of this Act to extend or improve its transportation facilities; to establish physical connection of its transportation facilities with the facilities of, and sell natural gas to, any person or municipality engaged or legally authorized to engage in the local distribution of natural or artificial gas to the public; and for such purpose to extend its transportation facilities to communities immediately adjacent to such facilities or to territory served by such natural-gas company or person, if the Commission finds that no undue burden will be placed upon the natural-gas company or person thereby.

"(2) Upon the petition of any person, the Commission, by order, may direct a natural-gas company or a person who has constructed, extended, or acquired, or is operating a facility under section 7(k) of this Act to establish, at petitioner's expense, physical connection of its transportation facilities with the petitioner's facilities in order to receive natural gas from the petitioner's facilities.

"(3) The Commission shall have no authority to—

"(A) compel the enlargement of transportation facilities for purposes described in paragraphs (1) and (2) of this subsection, or

"(B) compel a natural-gas company or a person who has constructed, extended, acquired, or who is operating a facility under section 7(k) of this Act to establish a physical connection or sell natural gas,

when to do so would impair its ability to render adequate service to its customers.".

NEPA COMPLIANCE

SEC. 202. (a) Section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)) is amended by adding the following after paragraph (2):

"(3) For purposes of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), the authorization of construction or extension of facilities by issuance of a certificate of public convenience and necessity by the Commission is the only Federal action that is considered a major Federal action requiring a detailed statement on the environmental impact of the proposed action in connection with the construction or extension of facilities.".

(b) Notwithstanding any other law, the Commission may charge an applicant directly for environmental documentation costs the Commission incurs in processing applications filed for permission to construct and operate natural gas pipeline facilities under the Natural Gas Act (15 U.S.C. 717 et seq.) and applications filed for hydroelectric licenses and relicenses under the Federal Power Act (15 U.S.C. 791 et seq.). Such a charge shall not be applied against the Commission's annual appropriations.

AMENDMENT TO SECTION 311 OF THE NATURAL GAS POLICY ACT OF 1978

SEC. 203. Section 311 of the Natural Gas Policy Act of 1978 (15 U.S.C. 3371) is amended by—

(1) amending the catchline to read as follows:

"SEC. 311. AUTHORIZATION OF CERTAIN SALES, TRANSPORTATION, AND CONSTRUCTION."; AND

(2) in subsection (a)—

(A) amending paragraph (1)(A) to read as follows:

"(A) IN GENERAL.—The Commission shall authorize, by rule or order, any interstate pipeline to transport natural gas on behalf of—

"(i) any intrastate pipeline,

"(ii) any local distribution company, or

"(iii) any other person.";

(B) amending paragraph (2)(A) to read as follows:

"(A) IN GENERAL.—The Commission shall authorize, by rule or order, any intrastate pipeline to transport natural gas on behalf of—

"(i) any interstate pipeline,

"(ii) any local distribution company served by any interstate pipeline, or

"(iii) any other person."; and

(C) adding the following after paragraph (2):

"(3) CONSTRUCTION.—Upon thirty days notification to the affected State commission, an interstate pipeline may construct facilities for transportation service provided under this subsection. Rates, terms, and conditions for services provided through facilities constructed for transportation service authorized under this subsection are not subject to State regulation.".

OPTIONAL CERTIFICATE PROCEDURES

SEC. 204. (a) Section 4 of the Natural Gas Act, (15 U.S.C. 717c) is amended—

(1) in subsection (a), by adding the following after "unlawful." "A rate or charge made, demanded or received by any natural-gas company in connection with the transportation or sale of natural gas through facilities authorized under section 7(i) of this Act is just and reasonable and complies with subsection (b) of this section if the natural-gas company and the person paying the rate or charge mutually agree to that rate or charge."; and

(2) by adding the following subsection after subsection (e)—

"(f) Subsections (c), (d), and (e) of this section do not apply to the transportation or sale of natural gas through facilities authorized by a certificate issued under section 7(i) of this Act.".

(b) Section 5(a) of the Natural Gas Act, (15 U.S.C. 717d) is amended by adding the following after the period "This subsection does not apply to any rate, charge, or classification by a natural-gas company in connection with transportation or sale of natural gas through facilities authorized by a certificate issued under section 7(i) of this Act.".

(c) Section 7 of the Natural Gas Act, (15 U.S.C. 717f) is amended—

(1) in subsection (c)(1)(B), by striking the period after "interest" and inserting

": *Provided further,* That the Commission shall issue a certificate for the construction, extension, or acquisition of facilities for the transportation or sale of natural gas and for the operation of those facilities for that purpose to a natural-gas company that fulfills the terms and conditions contained in section 7(i) without requiring a hearing or further proof that the public convenience and necessity would be served by those facilities. Such a certificate shall be non-exclusive and non-prejudicial to an application for any other authorization under the Natural Gas Act or the Natural Gas Policy Act."; and

(2) by adding the following two subsections after subsection (h)—

"(i)(1) The Commission shall issue to an applicant a certificate of public convenience and necessity to undertake the construction or extension of any facilities if the following terms and conditions are attached to the issuance of the certificate and to the exercise of the rights granted under it—

"(A) The applicant shall not include any costs or expenses it incurs in relation to the operation, sale, service, construction, extension, or acquisition of facilities covered by the certificate issued under this subsection in the rates and charges of any schedule required to be filed with the Commission under section 4(c);

"(B) Notwithstanding section 15(a) of this Act, the holder of a certificate issued under this subsection shall not participate in any proceedings under this Act to consider the application for a certificate for the construction or extension of facilities that, upon completion, would serve the service area served by the facilities authorized by the holder's certificate issued under this subsection.

"(2) The Commission shall issue to any applicant a certificate of public convenience and necessity authorizing the acquisition or operation of any facilities for which a certificate for the construction or extension has been issued under this subsection or for which abandonment of facilities or services subject to the jurisdiction of the Commission, including any sales or service rendered by means of such facilities, has been approved by the Commission under subsection (b) of this section if the terms and conditions in paragraph (1) (A) and (B) are attached to the issuance of the certificate and to the exercise of the rights granted under it.

"(j)(1) If the Commission, after a hearing held upon the petition of a person who has made a bona-fide offer to enter into a contract, finds that the failure to provide a requested rate, charge, classification, or practice in connection with the transportation of natural gas through facilities constructed, extended, acquired, or operated under a certificate issued under either section 7(i) or section 7(k) of this Act is unduly discriminatory, the Commission, considering market conditions and, to the extent relevant, the entire range of rates and services provided to others for transportation through those facilities, shall determine the rates, charges, classifications, or practices which are not unduly discriminatory to be observed and in force with respect to transportation to be provided to the petitioner, and shall fix the same by order.

"(2) A petition filed with the Commission under subsection (j)(1) shall contain a description of the transportation service sought, including the rates, charges, classifications, or practices requested by the petitioner, and the basis for asserting that the failure to provide the requested rates, charges, classifications, or practices is unduly discriminatory. Unless the Commission determines that capacity, in whole or in part, is not available to provide the transportation service sought by the petitioner, it shall issue an order within sixty days after the filing of the petition directing the requested transportation service to commence on the terms sought. However, if within sixty days of the filing of the petition, the person against whom the petition is filed responds by filing with the Commission the rates, charges, classifications, or practices which that person considers to be not unduly discriminatory for the service sought by the petitioner, the requested service shall commence sixty days after the filing of the petition, based upon the rates, charges, classifications, or practices filed in response, except to the extent the Commission finds capacity is not available. Any rate or charge collected on the basis of the response is subject to refund, with interest, by the person providing the transportation service for that portion which is collected in excess of rates or charges requested in the petition and which the Commission finds, after hearing, to be unduly discriminatory. The burden of proof to show that any rate or charge in excess of those filed in the petition is not unduly discriminatory is upon the person filing in response to the petition.".

NONJURISDICTIONAL OPTION

SEC. 205. (a) Section 7 of the Natural Gas Act, (15 U.S.C. 717f) is amended as follows—

(1) in subsection (c)(1)(A) by striking "No" and inserting in its place "Except as provided in sec-

tion 311 of the Natural Gas Policy Act of 1978 (15 U.S.C. 3371) or subsection (j) of this section, no", and

(2) adding the following after subsection (j), as added by this subtitle—

"(k)(1) A person may elect to construct, extend, acquire, or operate a facility for the transportation or sale of natural gas and engage in the transportation or sale of natural gas through that facility without a certificate of public convenience and necessity issued by the Commission under this section.

"(2) If a person elects under this subsection not to obtain a certificate of public convenience and necessity—

"(A) the person is not a natural-gas company for the purposes of this Act in relation to the construction, extension, acquisition, or operation of facilities under this subsection or any sales or services rendered by means of such facilities;

"(B) notwithstanding section 15(a) of this Act, the person shall not participate in any proceeding under this Act to consider an application for a certificate for the construction or extension of facilities that, upon completion, would serve the service area served by the facility or extension constructed under this subsection;

"(C) the construction or extension of a facility authorized under this subsection may be subject to regulation by a State; however, rates or charges for the transportation or sale of natural gas by means of a facility or extension authorized under this subsection are not subject to regulation by a State, except that they may be regulated if that facility or extension is engaged solely in activities described in section 1(c) of this Act (15 U.S.C. 717(c)).".

(b) Section 4 of the Natural Gas Act (15 U.S.C. 717c) is amended by adding after subsection (f) as added by this subtitle, the following new subsection—

"(g) After a hearing held upon the application of a natural-gas company, if the Commission finds that the natural-gas company has demonstrated that a market that the natural-gas company is authorized to serve is competitive and that the natural-gas company's transportation or sales services are offered in that market on a not unduly discriminatory basis, the Commission may issue an order finding that the rates and charges made, demanded, or received by the natural-gas company for or in connection with the transportation or sale of natural gas in that market are not subject to the jurisdiction of the Commission under this Act. A hearing held under this section is subject to section 15 of this Act.".

Subtitle B—Natural Gas Import/Export Deregulation

Coverage of Natural Gas Act

SEC. 211. Section 1(c) of the Natural Gas Act (15 U.S.C. 717(c)) is amended by inserting "or exported from such State" after "State" the second time it appears.

DEFINITIONS

SEC. 212. Section 2 of the Natural Gas Act (15 U.S.C. 717a) is amended—

(1) in paragraph (7) by inserting "including a foreign country," after "thereof," both places it appears, and

(2) by adding the following after paragraph (9):

"(10) 'Importation' means the actions involved in bringing natural gas into the United States.

"(11) 'Exportation' means the actions involved in taking natural gas out of the United States.".

NATURAL GAS IMPORTS AND EXPORTS

SEC. 213. Section 3 of the Natural Gas Act (15 U.S.C. 717b) is amended to read as follows:

"EXPORTATION OR IMPORTATION OF NATURAL GAS

"SEC. 3. (a) Importation of natural gas is considered a first sale for purposes of this Act and the Natural Gas Policy Act of 1978 (15 U.S.C. 3301–3432).

"(b) Neither the Commission nor a State may prohibit or condition the exportation or importation of natural gas or treat exported or imported natural gas while it is within the United States differently than any other natural gas.

"(c) The President may prohibit or condition the exportation or importation of natural gas upon finding that it is in the national interest.

"(d) Upon finding that the exportation or importation of natural gas is in the national interest, the President may waive any law relating to the exportation or importation of natural gas or may specify, by schedule or otherwise, when a particular law relating to the exportation or importation of natural gas is considered satisfied if the appropriate Federal or State agency has not taken final action.".

Subtitle C—Structural Reform of the Federal Energy Regulatory Commission

NATURAL GAS AND ELECTRICITY ADMINISTRATION

SEC. 221. (a) Section 2(a) of the Department of Energy Organization Act (42 U.S.C. 7101(a)) is amended by striking ", including the Federal Energy Regulatory Commission".

(b) Section 204 of the Department of Energy Organization Act (42 U.S.C. 7134) is amended to read as follows:

"NATURAL GAS AND ELECTRICITY ADMINISTRATION

"SEC. 204. There shall be within the Department a Natural Gas and Electricity Administration established by title IV of this Act to be headed by an Administrator who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for in level III of the Executive Schedule under section 5314 of title 5, United States Code.".

(c) Section 301(b) of the Department of Energy Organization Act (42 U.S.C. 7151(b)) is amended to read as follows:

"(b) There are transferred to, and vested in, the Secretary the functions of the Federal Power Commission, the Federal Energy Regulatory Commission, and the members, officers, or components thereof.".

(d) Section 306 of the Department of Energy Organization Act (42 U.S.C. 7155) is amended by striking "Except as provided in title IV, there" and inserting in its place "There".

(e) Title IV of the Department of Energy Organization Act is amended to read as follows:

"TITLE IV—NATURAL GAS AND ELECTRICITY ADMINISTRATION APPOINTMENT AND ADMINISTRATION

"SEC. 401. (a) There is established within the Department an Administration to be known as the Natural Gas and Electricity Administration.

"(b) The Secretary is responsible for the executive and administrative operation of the Natural Gas and Electricity Administration, including functions of the Natural Gas and Electricity Administration with respect to the appointment and employment of hearing examiners in accordance with title 5, United States Code.

"(c) The Secretary may require that hearing examiners appointed under this section conduct hearings on any matter within the Secretary's jurisdiction.

RULEMAKING PROCEEDINGS FOR RATES AND CHARGES

"SEC. 402. (a) Any function transferred to the Secretary under section 301(b) or section 306 of this Act which relates to the establishment of rates and charges under the Federal Power Act or the Natural Gas Act may be conducted by rulemaking procedures. Except as provided in subsection (b), the procedures in such a rulemaking proceeding shall assure full consideration of the issues and an opportunity for interested persons to present their views.

"(b) With respect to any rule or regulation promulgated by the Secretary to establish rates and charges for the first sale of natural gas by a producer or gatherer to a natural gas pipeline under the Natural Gas Act, the Secretary may afford any interested person a reasonable opportunity to submit written questions with respect to disputed issues of fact to other interested persons participating in the rulemaking proceedings. The Secretary may establish a reasonable time for both the submission of questions and responses.".

(f) Section 501(a) of the Department of Energy Organization Act (42 U.S.C. 7191(a)) is amended—

(1) by striking "(1)";

(2) by striking "other than the Commission,"; and

(3) by striking paragraph (2).

(g) Section 502 of the Department of Energy Organization Act (42 U.S.C. 7192) is amended:

(1) in subsection (a) by striking ", the Commission"; and

(2) in subsection (c) by striking "Subject to the provisions of section 401 of this Act, and notwithstanding" and inserting in its place "Notwithstanding".

(h) Section 503 of the Department of Energy Organization Act (42 U.S.C. 7193) is amended—

(1) by amending subsection (c) to read as follows:

"(c) If within thirty days after the receipt of the remedial order issued by the Secretary, the person notifies the Secretary that he intends to contest a remedial order issued under subsection (a) of this section, the Secretary shall stay the effect of the remedial order, unless the Secretary finds the public interest requires immediate compliance with the order. The Secretary, upon request, shall afford an opportunity for a hearing, including, at a minimum, the submission of briefs, oral or documentary evidence, and oral arguments. To the extent that the Secretary determines that the right of cross examination is required for a full and true disclosure of the facts, the Secretary shall afford it. The Secretary shall thereafter issue an order, based on findings of fact, affirming, modifying, or vacating the remedial order, or directing other appropriate relief, and such order shall, for the purpose of judicial review, constitute a final agency action."; and

(2) by striking subsection (d).

(i) Section 504 of the Department of Energy Organization Act (42 U.S.C. 7194) is amended—

(1) in subsection (b)(1) by striking "Commission" and inserting in its place "Secretary"; and

(2) in subsection (b)(2) to read as follows:

"(b)(2) The Secretary shall, by rule, establish appropriate procedures, including a hearing when requested, for review of a denial. Action by the Secretary under this section shall be considered final agency action within the meaning of section 704 of title 5, United States Code.".

(j) Section 605(a)(3) of the Department of Energy Organization Act (42 U.S.C. 7215(a)(3)) by striking "or the Commission, as the case may be,".

(k) Section 649(a) of the Department of Energy Organization Act (42 U.S.C. 7259(a)) is amended by striking "and the Federal Energy Regulatory Commission" and "or the Commission".

(l)(1) Section 705 of the Department of Energy Organization Act (42 U.S.C. 7295) is amended—

(A) in subsection (a)(1) by striking "or the Commission"; and

(B) in subsection (a)(2) by striking "the Federal Energy Regulatory Commission,"; and

(C) in subsection (b)(2) by striking "and the Commission" and "or the Commission".

(2) For purposes of the transfer of functions from the Federal Energy Regulatory Commission to the Secretary of Energy by this Act, the phrases "the time this Act takes effect", "the date this Act takes effect", and "the date on which this Act takes effect" in section 705 of the Department of Energy Organization Act (42 U.S.C. 7295) are considered to refer to the date of enactment of this Act.

(m) Section 707 of the Department of Energy Organization Act (42 U.S.C. 7297) is amended by striking "the Federal Energy Regulatory Commission,".

(n) Section 708 of the Department of Energy Organization Act (42 U.S.C. 7298) is amended by striking "Except as provided in title IV, nothing" and inserting in its place "Nothing".

(o) Title 5, United States Code, is amended—

(1) in section 5314 by striking the following item: "Chairman, Federal Energy Regulatory Commission." and inserting in its place "Administrator, Natural Gas and Electricity Administration"; and

(2) in section 5315 by striking the following item: "Members, Federal Energy Regulatory Commission.".

(p) Section 901 of the Department of Energy Organization Act (42 U.S.C. 7341) is amended by striking "and the Commission" and "or the Commission".

(q) The Table of Contents of the Department of Energy Organization Act is amended—

(1) by striking the item for section 204 and inserting in its place "Natural Gas and Electricity Administration."; and

(2) by amending the items relating to title IV to read as follows:

"TITLE IV—NATURAL GAS AND ELECTRICITY ADMINISTRATION

"Sec. 401. Appointment and administration.
"Sec. 402. Rulemaking proceedings for rates and charges.".

TITLE III—OIL

Subtitle A—Alaska Coastal Plain Oil and Gas Leasing

PART 1—SHORT TITLE AND STATEMENT OF PURPOSE

SHORT TITLE

SEC. 301. This subtitle may be cited as the "Arctic Coastal Plain Competitive Oil and Gas Leasing Act".

STATEMENT OF PURPOSE

SEC. 302. It is the purpose of this subtitle to authorize competitive oil and gas leasing and development to proceed on the Coastal Plain in a manner consistent with protection of the environment, maintenance of fish and wildlife and their habitat, and the interests of the area's subsistence users.

PART 2—DEFINITIONS

DEFINITIONS

SEC. 303. When used in this subtitle—

(1) "Coastal Plain" means that area identified as such in the map entitled "Arctic National Wildlife Refuge", dated February, 1991, on file in the office of the Director of the United States Fish and Wildlife Service;

(2) "Secretary" means the Secretary of the Interior or the Secretary's designee; and

(3) "significant adverse effects" means those effects which, despite the reasonable application of mitigation measures, if any, involving appropriate technology, engineering, and environmental control measures, including siting and timing restrictions, would result in widespread long-term reductions in habitat quality or availability that cause, or are likely to cause, a widespread long-term reduction in the natural abundance of any species of fish, wildlife, or plant.

PART 3—COASTAL PLAIN COMPETITIVE LEASING PROGRAM LEASING PROGRAM FOR LANDS WITHIN THE COASTAL PLAIN

SEC. 304. (a) The Secretary and other appropriate Federal officers and agencies shall take the actions necessary to establish and implement a competitive oil and gas leasing program that will provide for an environmentally sound program for the exploration, development, and production of the oil and gas resources of the Coastal Plain. Activities pursuant to such program shall be undertaken—

(1) in accordance with the standards for protection of the environment required by part 4 of this subtitle; and

(2) in a manner to ensure that the public receives fair market value for the lands to be leased.

(b) This subtitle shall be the Secretary's sole legislative authority for authorizing and conducting an oil and gas leasing program on the Coastal Plain and related activities.

(c) The Coastal Plain shall be considered "Federal land" for purposes of the Federal Oil and Gas Royalty Management Act of 1982.

RULES AND REGULATIONS

SEC. 305. (a) The Secretary shall prescribe such rules and regulations as may be necessary to carry out the purposes and provisions of this subtitle, including, but not limited to, rules and regulations relating to protection of the environment of the Coastal Plain, as required by part 4 of this subtitle. Such rules and regulations shall be promulgated within nine months after the date of enactment of this subtitle and shall, as of their effective date, apply to all operations conducted under a lease issued under the provisions of this subtitle and all operations on the Coastal Plain related to the exploration, development and production of oil and gas and related activities.

(b) In the formulation and promulgation of rules and regulations under this subtitle, the Secretary shall consult with appropriate officials of the State of Alaska and the

Government of Canada. The Secretary shall also consult with the Environmental Protection Agency and the Army Corps of Engineers in developing rules and regulations relating to the environment.

(c) The Secretary shall periodically review and, if in the Secretary's judgment it is appropriate, revise the rules and regulations issued under subsection (a) of this section to reflect any significant biological, environmental, or engineering data which come to the Secretary's attention.

ADEQUACY OF THE DEPARTMENT OF THE INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT

SEC. 306. (a) The "Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain prepared pursuant to section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142), and section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)), is hereby found by the Congress to be compatible and consistent with the major purposes and policies of the National Environmental Policy Act of 1969 with respect to actions authorized to be taken by the Secretary to develop and promulgate the regulations for the establishment of a leasing program authorized by this subtitle prior to conducting the first lease sale, and therefore, nothing in the National Environmental Policy Act of 1969 shall require any further environmental analysis or documentation in the development and promulgation of such regulations.

(b) Except as provided in subsection (a) of this section, nothing in this subtitle shall be considered or construed as otherwise limiting, amending, or affecting in any way the applicability of section 102(2)(C) of the National Environmental Policy Act of 1969 or its implementing regulations to all phases of oil and gas leasing, exploration, development and production and related activities conducted under or associated with the leasing program authorized by this subtitle, nor shall anything in this subtitle, except as provided in section 322 of this subtitle, be considered or construed as in any way limiting, amending, or affecting the applicability of any other Federal law or State law not in conflict with Federal law relating to the protection of the environment.

LEASE SALES

SEC. 307. (a) Lands may be leased pursuant to this subtitle to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act, as amended (30 U.S.C. 181).

(b) The Secretary shall, by regulation, establish procedures for—

(1) receipt and consideration of sealed nominations for any area in the Coastal Plain for inclusion in, or exclusion from a lease sale;

(2) public notice of and comment on designation of areas to be included in, or excluded from, a lease sale;

(3) review and comment by the State of Alaska and local governments in Alaska which may be affected by oil and gas exploration, development or production activities on the Coastal Plain on the schedule, configuration, and terms and conditions of each proposed lease sale; and

(4) periodic consultation with the State of Alaska and local governments in Alaska, oil and gas lessees, and representatives of other individuals or organizations engaged in activity in or on the Coastal Plain including those involved in subsistence uses and recreational activities.

(c) The Secretary shall, by regulation, provide for lease sales of lands on the Coastal Plain. When lease sales are to be held, they shall occur after the nomination process provided for in subsection (b) of this section. For the first lease sale, the Secretary shall, consistent with the requirements set forth in part 4 of this subtitle, offer for lease those acres nominated pursuant to subsection (b), giving preference to those acres receiving the greatest number of nominations, but not to exceed a total of three hundred thousand acres. If the total acreage nominated is less than three hundred thousand acres, the Secretary shall include in such sale any other acreage which the Secretary believes has the highest resource potential, but in no event shall more than three hundred thousand acres of the Coastal Plain be offered in such sale. Thereafter, no more than three hundred thousand acres of the Coastal Plain may be leased in any one lease sale. The initial lease sale shall be held within eighteen months of the issuance of final regulations by the Secretary. The second lease sale shall be held twenty-four months after the initial sale, with additional sales every twenty-four months thereafter so long as sufficient interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

(d) Areas of the Coastal Plain deemed by the Secretary to be of particular environmental sensitivity may be excluded from leasing by the Secretary. The Secretary shall notify the Committee on Energy and Natural Resources of the United States Senate and the Committee on Interior and Insular Affairs of the United States House of Representatives ninety days in advance of excluding any such areas from leasing. If the Secretary later determines that exploration, development, or production will result in no significant adverse effect on fish and wildlife, their habitat, and the environment, the Secretary shall, consistent with the provisions of subsection (c) of this section, offer such lands for leasing.

GRANT OF LEASES BY THE SECRETARY OF THE INTERIOR

SEC. 308. (a) Consistent with the provisions of section 303(a)(2) of this subtitle, the Secretary is authorized to grant to the highest responsible qualified bidder by sealed competitive cash bonus bid any lands to be leased on the Coastal Plain upon payment by the lessee of such bonus as may be accepted by the Secretary. The royalty shall be fixed in the lease and shall be not less than 12½ percent in amount or value of the production removed or sold from the lease.

(b) The Secretary shall not issue a lease or leases or approve the assignment of any lease or leases under the terms of this subtitle to any person, association, corporation, or any subsidiary, affiliate, or person controlled by or under common control with such person, association, or corporation, during any period in which, as determined by the Secretary, such entity has failed or refused to comply in any material respect with the reclamation requirements and other standards established for any prior lease to which such requirements and standards applied. Prior to making such determination with respect to any such entity the Secretary shall provide such entity with adequate notification and an opportunity to comply with such reclamation requirements and other standards and shall consider whether any administrative or judicial appeal is pending. Once the entity has complied with the reclamation requirement or other standard concerned, the Secretary may issue an oil and gas lease to the entity under this subtitle.

(c)(1) Following each notice of a proposed lease sale and before the acceptance of bids and the issuance of leases based on such bids, the Secretary shall allow the Attorney General, in consultation with the Federal Trade Commission, thirty days to review the results of such lease sale, except that the Attorney General, after consultation with the Federal Trade Commission, may agree to a shorter review period.

(2) The Attorney General may, in consultation with the Federal Trade Commission, conduct such antitrust review on the likely effects the issuance of such leases would have on competition as the Attorney General, after consultation with the Federal Trade Commission, deems appropriate and shall advise the Secretary with respect to such review. The Secretary shall provide such information as the Attorney General, after consultation with the Federal Trade Commission, may require in order to conduct any antitrust review pursuant to this paragraph and to make recommendations pursuant to paragraph (3) of this subsection.

(3) The Attorney General, after consultation with the Federal Trade Commission, may make such recommendations to the Secretary, including the nonacceptance of any bid or the imposition of terms or conditions on any lease, as may be appropriate to prevent any situation which may substantially lessen competition. If the Secretary determines, or if the Attorney General advises the Secretary, after consultation with the Federal Trade Commission and prior to the issuance of any lease, that such lease would create or maintain a situation which may substantially lessen competition, the Secretary may—

(A) refuse to accept an otherwise qualified bid for such lease, or refuse to issue such lease, notwithstanding subsection (a) of this section; or

(B) modify or impose terms or conditions on the lease, consistent with advice provided by the Attorney General.

(4) The Secretary may issue a lease notwithstanding adverse advice from the Attorney General, or refuse to impose recommended terms or conditions, if the Secretary makes specific findings that approval of the lease is necessary to carry out the purposes of this subtitle, that approval is consistent with the public interest, and that there are no reasonably available alternatives that would have significantly less anticompetitive effects. In such event, the

Secretary must notify the lessee and the Attorney General of his findings.

(5) Nothing in this subsection shall restrict the authority of the Attorney General, the Federal Trade Commission, or any other Federal department or agency to secure information, conduct reviews, make recommendations, or seek appropriate relief.

(d) Nothing in this subtitle shall be deemed to convey to any person, association, corporation, or other business organization immunity from civil or criminal liability, or to create defenses to actions, under any antitrust law.

(e) As used in this section "antitrust review" means an "antitrust investigation" for the purpose of the Antitrust Civil Process Act (15 U.S.C. 1311).

LEASE TERMS AND CONDITIONS

SEC. 309. An oil and gas lease issued pursuant to this section shall—

(1) be for a tract consisting of a compact area not to exceed two thousand five hundred and sixty acres, or four surveyed or protracted sections, whichever is larger, which shall be as compact in form as possible: *Provided,* That the Secretary is authorized to lease on a case-by-case basis units of up to three thousand eight hundred and forty acres when necessary to consolidate partial tracts adjacent to the external boundaries of the Coastal Plain;

(2) be for an initial period of ten years and shall be extended for so long thereafter as oil or gas is produced in paying quantities from the lease or unit area to which the lease is committed or for so long as drilling or reworking operations, as approved by the Secretary, are conducted on the lease or unit area;

(3) require the payment of royalty as provided for in section 308 of this subtitle;

(4) require approval of an exploration plan, as provided for in section 310 of this subtitle;

(5) require approval of a development and production plan, as required in section 310 of this subtitle;

(6) require posting of bond required by section 311 of this subtitle;

(7) provide for the suspension of the lease during the initial lease term or thereafter pursuant to section 312 of this subtitle;

(8) provide for the cancellation of the lease during the initial lease term or thereafter pursuant to section 313 of this subtitle;

(9) contain the terms and conditions relating to protection of fish and wildlife, their habitat, and the environment, as required by part 4 of this subtitle;

(10) forbid the flaring of natural gas from any well unless the Secretary finds that such flaring is necessary to alleviate a temporary emergency situation or to conduct testing or work-over operations;

(11) contain such rental and other provisions as the Secretary may prescribe at the time of offering the area for lease; and

(12) contain such other provisions as the Secretary determines necessary to ensure compliance with this subtitle and the regulations issued under it.

EXPLORATION AND DEVELOPMENT AND PRODUCTION PLANS

SEC. 310. (a) All exploration activities pursuant to any lease issued or maintained under this subtitle shall be conducted in accordance with an approved exploration plan or an approved revision of such plan. Prior to commencing exploration pursuant to any oil and gas lease issued or maintained under this subtitle, the holder thereof shall submit an exploration plan to the Secretary for approval. Such plan may apply to more than one lease held by a lessee in any region of the Coastal Plain, or by a group of lessees acting under a unitization, pooling, or drilling agreement, and shall be approved by the Secretary if the Secretary finds that such plan is consistent with this subtitle and other applicable law.

(b) All development and production pursuant to a lease issued or maintained pursuant to this subtitle shall be conducted in accordance with an approved development and production plan. Prior to commencing development or production pursuant to any oil and gas lease issued or maintained under this subtitle, the holder thereof shall submit a development and production plan to the Secretary for approval. Such plan may apply to more than one lease held by a lessee in any region of the Coastal Plain, or by a group of lessees acting under a unitization, pooling, or drilling agreement, and shall be approved by the Secretary if the Secretary finds that such plan is consistent with this subtitle and other applicable law.

(c) Exploration plans and development and production plans shall include where applicable—

(1) the names and legal addresses of the following persons: the operator, contractors, subcontractors and the owners or lessees other than the operator;

(2) a map or maps showing—

(A) the location of a point of reference selected by the operator within the area covered by the plan of operations showing, in relation to that point, existing and proposed access routes or roads within the area, the boundaries of proposed surface disturbance and location of all survey lines;

(B) the location of proposed drilling sites, wellsite layout, and all surface facilities;

(C) sources of construction materials within the area including but not limited to water and gravel; and

(D) the location of ancillary facilities including but not limited to camps, sanitary facilities, water supply, disposal facilities, pipelines, fuel storage facilities, storage facilities, base of operations, and airstrips. A point of reference selected by the operator within the area of operations shall be marked with a ground monument;

(3) a description of—

(A) all surface and ancillary facilities, including but not limited to camps, sanitary facilities, water supply, disposal facilities, pipelines, fuel storage facilities, storage facilities, base of opertions, and airstrips;

(B) the major equipment to be used in the operations, including but not limited to equipment and methods for transporting all waters used in or produced by operations, and the proposed method of transporting such equipment within the area covered by the plan of operations including to and from the site; and

(C) construction materials within the area including but not limited to water and gravel;

(4) an estimated schedule for any phase of operations of which review by the Secretary is sought and the anticipated date of operation completion;

(5) the nature and extent of proposed operations;

(6) a description of all licenses and permits necessary to carry out the plan;

(7) plans for reclamation, including:

(A) the anticipated reclamation work to be performed;

(B) a proposed schedule of reclamation activities to be performed; and

(C) a detailed estimate of reclamation costs;

(8) methods for the storage and disposal of all wastes and hazardous and toxic substances;

(9) an affidavit stating that the operations planned will be in compliance with all applicable Federal, State, and local laws and regulations;

(10) contingency plans in case of spills, leaks, or other accidents;

(11) certification that the plan complies with the State of Alaska's approved coastal zone management program, if required by the Coastal Zone Management Act of 1972, as amended, and the date such certification was submitted to the appropriate State agency for review pursuant to section 307(c)(3) of that Act; and

(12) such additional information as may be required by the Secretary to ensure that the proposed activities are consistent with this subtitle, as well as other applicable Federal and State environmental laws.

(d)(1) After an exploration or development and production plan is submitted for approval, the Secretary shall promptly publish notice of the submission and availability of the text of the proposed plan in the Federal Register and a newspaper of general circulation in the State of Alaska and provide an opportunity for written public comment.

(2) Within one hundred and twenty days after receiving an exploration or development and production plan; or when consistency certification is required under the Coastal Zone Management Act of 1972, within thirty days

after the State of Alaska concurs, or is conclusively presumed to concur, with the consistency certification accompanying the plan pursuant to section 307(c)(B) (i) or (ii) of the Coastal Zone Management Act of 1972 or the Secretary of Commerce makes the finding authorized by section 307(c)(3)(B)(iii) of such Act, whichever period is later, the Secretary shall determine, after taking into account any comment received under paragraph (1) of this subsection, whether the activities proposed in the plan are consistent with this subtitle and other applicable provisions of Federal law and State law not in conflict with Federal law. If that determination is in the affirmative, the Secretary shall return the plan along with a statement of any modifications necessary for its approval. The Secretary, as a condition of approving any plan under this section—

(A) may require modifications to the plan that the Secretary considers necessary or appropriate to make it consistent with this subtitle and other applicable law. The Secretary shall assess reasonable fees or charges for the reimbursement of all necessary and reasonable research, administrative, monitoring, enforcement, and reporting costs associated with reviewing the plan and monitoring its implementation; and

(B) shall require such periodic reports regarding the carrying out of the drilling and related activities as may be necessary or appropriate for purposes of determining the extent to which the plan is being complied with and the effectiveness of the plan in ensuring that the drilling and related activities are consistent with this subtitle and other applicable provisions of Federal law and State law not in conflict with Federal law.

(e) If at any time while activities are being carried out under a plan approved under this section, the Secretary, on the basis of available information, determines that the continuation of any particular activity under the plan is likely to result in a significant adverse effect on fish or wildlife, or on their habitat, or on the environment, the Secretary, after consultation with the lessee, shall—

(1) make modifications to part or all of the plan as necessary or appropriate to avoid the significant adverse effect;

(2) temporarily suspend part or all of the drilling or related activity under the plan for such time as the Secretary considers necessary or appropriate to avoid significant adverse effect; or

(3) terminate and cancel the plan when actions under paragraphs (1) or (2) will not avoid the significant adverse effect.

BONDING REQUIREMENTS

SEC. 311. (a) As a condition of approval of an exploration or development and production plan, the lessee shall be required to file with the Secretary a suitable performance bond. The bond shall be conditioned upon compliance with all the terms and conditions of the lease and all applicable laws. Such performance bond is in addition to and not in lieu of any bond or security deposit required by other regulatory authorities or required by any other provision of law. The lessee may file either a surety bond, or a personal bond consisting of cash or negotiable Treasury bonds of the United States. When negotiable Treasury bonds serve as the personal bond, they shall be accompanied by a proper conveyance to the Secretary of full authority to sell such securities in case of a default in the performance of the terms and conditions of the lease.

(b)(1) The performance bond shall be in an amount—

(A) to be determined by the Secretary to provide for the estimated full cost of reclamation of the lease site in accordance with an approved or revised exploration or development and production plan; plus

(B) an amount set by the Secretary, consistent with the type of operations proposed, to cover the estimated costs to provide the means for rapid and effective cleanup, and to minimize damages resulting from an oil spill; the escape of gas, refuse, domestic wastewater, or hazardous or toxic substances; or fire caused by oil and gas activities.

(2) The Secretary shall review, and adjust if he determines necessary, the amount of the performance bond at least every three years to ensure its adequacy in accordance with paragraph (1) of this subsection.

(c) In the event that an approved exploration or development and production plan is revised, the Secretary may adjust the amount of the bond to conform to such modified plan.

(d) The responsibility and liability of the lessee and its surety under the bond or security deposit shall continue until such time as the Secretary, after consultation with affected Federal and State agencies, determines that there has been compliance with the terms and conditions of the lease and all applicable law.

(e) Within sixty days after determining that there has been compliance with the terms and conditions of the lease and all applicable laws, the Secretary shall notify the lessee that the period of liability under the bond or security deposit has been terminated.

LEASE SUSPENSION

SEC. 312. The Secretary may direct or assent to the suspension of operations and production under any lease granted under the terms of this subtitle—

(1) in the interest of conservation of the resource;

(2) where there is no available system to transport the resource; or

(3) where there is a threat of significant adverse effect upon fish or wildlife, their habitat or the environment.

If such a suspension is directed or assented to by the Secretary, any payment of rental prescribed by such lease shall be suspended during such period of suspension of operations and production, and the term of the lease shall be extended by adding any such suspension period thereto.

LEASE CANCELLATION

SEC. 313. Whenever the owner of a nonproducing lease fails to comply with any of the provisions of this subtitle, or of any applicable provision of Federal or State environmental law, or of the lease, or of any regulation issued under this subtitle, such lease may be canceled by the Secretary if such default continues for the period of thirty days after mailing of notice by registered letter to the lease owner at the lease owner's record post office address.

(b) Whenever the owner of any producing lease fails to comply with any of the provisions of this subtitle, or of any applicable provision of Federal or State environmental law, or of the lease, or of any regulation issued under this subtitle, such lease may be forfeited and canceled by any appropriate proceeding brought by the Secretary in any United States district court having jurisdiction under this subtitle.

(c)(1) In addition to the authority for lease cancellation provided for by subsections (a) and (b) of this section, any lease may be canceled at any time, if the Secretary determines, after a hearing, that—

(A) continued activity pursuant to such lease is likely to result in a significant adverse effect to fish or wildlife, their habitat, or the environment, or is likely to result in serious harm or damage to human life, to property, or to the national security or defense;

(B) the likelihood of a significant adverse effect will not disappear within a reasonable period of time or the threat of harm or damage will not disappear or decrease to any acceptable extent within a reasonable period of time; and

(C) the advantages of cancellation outweigh the advantages of continuing such lease.

(2) Such cancellation shall not occur unless and until operations under such lease shall have been under suspension, or temporary prohibition, by the Secretary, with due extension of any lease term continuously for a period of five years, or for a lesser period upon request of the lessee.

(3) Cancellation under this subsection shall entitle the lessee to receive such compensation as the lessee demonstrates to the Secretary to be equal to the lesser of—

(A) the fair market value of the canceled rights as of the date of cancellation, taking account of both anticipated revenues from the lease and anticipated costs, including the costs of compliance with all applicable regulations and operating orders; liability for cleanup costs or damages, or both, in the case of an oil spill or spill of other hazardous or toxic materials; fines, damages, penalties, or removal costs assessed pursuant to section 318 of this subtitle or other State or Federal environmental law; any fees paid pursuant to section 331 of this subtitle; and all other costs reasonably anticipated on the lease; or

(B) the excess, if any, over the lessee's revenues from the lease (plus interest thereon from the date of receipt to the date of reimbursement) of all consideration paid for the lease and all direct expenditures made by the lessee (exclusive of any fines, damages, penalties, or removal costs assessed pursuant to section 318 of this subtitle or other State or Federal environmental law, and any fees paid pursuant to section 331 of this subtitle) after the date of issuance of such lease and in connection with exploration or development, or both, pursuant to the lease (plus interest on such consideration and such expenditures from date of payment to date of reimbursement).

(d) Cancellation of a lease under this section shall in no way release the owner of the lease from the obligation to provide for reclamation of the lease site.

ASSIGNMENT OR SUBLETTING OF LEASES

SEC. 314. No lease issued under this subtitle shall be assigned or sublet, except with the consent of the Secretary.

RELINQUISHMENT

SEC. 315. The lessee may, at the discretion of the Secretary, be permitted at any time to make written relinquishment of all rights under any lease issued pursuant to this subtitle. The Secretary shall accept the relinquishment by the lessee of any lease issued under this subtitle where there has not been surface disturbance on the lands covered by the lease.

UNITIZATION

SEC. 316. For the purpose of conserving the natural resources of any oil or gas pool, field, or like area, or any part thereof and in order to avoid the unnecessary duplication of facilities, to protect the environment of the Coastal Plain, and to protect correlative rights, the Secretary shall require to the greatest extent practicable, that lessees unite with each other in collectively adopting and operating under a cooperative or unit plan of development for operation of such pool, field, or like area, or any part thereof including the construction of a common carrier pipeline to transport oil and gas to the exterior boundary of the Coastal Plain. The Secretary is also authorized and directed to enter into such agreements as are necessary and appropriate for the protection of the United States against drainage.

OIL AND GAS GEOLOGICAL AND GEOPHYSICAL INFORMATION

SEC. 317. (a)(1) Any lessee or permittee conducting any exploration for, or development or production of, oil or gas pursuant to this subtitle shall provide the Secretary access to all geological and geophysical data and information (including processed, analyzed, and interpreted information) obtained from such activity and shall provide copies of such data and information as the Secretary may request. Such data and information shall be provided in accordance with regulations which the Secretary shall prescribe.

(2) If interpreted information provided pursuant to paragraph (1) of this subsection is provided in good faith by the lessee or permittee, such lessee or permittee shall not be responsible for any consequence of the use or of reliance upon such interpreted information.

(3) Whenever any geological or geophysical data or information is provided to the Secretary, pursuant to paragraph (1) of this subsection—

(A) by a lessee or permittee, in the form and manner of processing which is utilized by such lessee or permittee in the normal conduct of business, the Secretary shall pay the reasonable cost of reproducing such data and information; or

(B) by a lessee or permittee, in such other form and manner of processing as the Secretary may request, the Secretary shall pay the reasonable cost of processing and reproducing such data and information.

(b) The Secretary shall maintain the confidentiality of all geological and geophysical information obtained pursuant to subsection (a) of this section until such time as the Secretary determines that making such data available to the public would not be likely to damage the competitive position of the lessee or permittee.

REMEDIES AND PENALTIES

SEC. 318. (a) Except as provided in section 319 of this subtitle, the district courts of the United States shall have jurisdiction of cases and controversies arising out of, or in connection with, any lease issued under this subtitle. Proceedings may be instituted in the judicial district in which any defendant resides or has his principal place of business, or in the judicial district in which the Coastal Plain is located.

(b) At the request of the Secretary, the Attorney General may institute a civil action in the district court of the United States for the district in which any defendant resides or has his principal place of business, or in the judicial district in which the Coastal Plain is located, for a permanent or temporary injunction, or, in addition to the Secretary's authority under subsection (c), to assess and recover a civil penalty of not more than $20,000 per day for each violation, or for any other appropriate remedy to enforce any provision of this subtitle, any regulation or order issued under this subtitle, or any term of a lease issued pursuant to this subtitle.

(c)(1) Except as provided in paragraph (2), if any person fails to comply with any provision of this subtitle, or any term of a lease issued pursuant to this subtitle, or any regulation or order issued under this subtitle, after notice of such failure and expiration of any reasonable period allowed for corrective action, such person shall be liable for a civil penalty of not more than $20,000 for each day of the continuance of such failure. The Secretary may assess, collect and compromise any such penalty. No penalty shall be assessed until the person charged with a violation has been given an opportunity for a hearing. The Secretary shall, by regulation at least every three years, adjust the penalty specified in this paragraph to reflect any increases in the Consumer Price Index (all items, United States average) as prepared by the Department of Labor.

(2) If a failure described in paragraph (1) constitutes or constituted a threat of an irreparable or immediate significant adverse effect on fish and wildlife or their habitat, property, any mineral deposit, or the marine, coastal plain, or human environment, a civil penalty may be assessed without regard to the requirement of expiration of a period allowed for corrective action.

(d) Any person who knowingly—

(1) violates any provision of this subtitle, any term of a lease issued pursuant to this subtitle, or any regulation or order issued under this subtitle de-

signed to protect health, safety, or the environment or conserve natural resources;

(2) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any application, record, report or other document filed or required to be maintained under this subtitle;

(3) falsifies, tampers with, or renders inaccurate any monitoring device or method of record required to be maintained under this subtitle; or

(4) reveals any data or information required to be kept confidential by section 317 of this subtitle,

shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than ten years, or both. Each day that a violation under paragraph (1) of this subsection continues, or each day that any monitoring device or data recorder remains inoperative or inaccurate because of any activity described in paragraph (3) of this subsection, shall constitute a separate violation for purposes of imposition of a fine under this subsection.

(e) Whenever a corporation or other entity is subject to prosecution under subsection (d) of this section, any officer or agent of such corporation or entity who knowingly authorized, ordered, or carried out the proscribed activity shall be subject to the same fines or imprisonment, or both, as provided for under subsection (d) of this section.

(f) The remedies and penalties prescribed in this subtitle shall be concurrent and cumulative and the exercise of one shall not preclude the exercise of the others. Further, the remedies and penalties prescribed in this subtitle shall be in addition to any other remedies and penalties afforded by any other law or regulation.

(g) In the case of any discharge of oil, hazardous or toxic substances, or any other pollutant that adversely affects the environment in the area of the Coastal Plain or adjacent waters from exploration, development, or production of oil or gas or related activities, conducted by, or on behalf of, a responsible party, each responsible party shall be jointly, severally and strictly liable for the removal costs and damages specified in this subsection that arise out of or directly result from such pollution. The Secretary shall make a determination with respect to such liability for all remedies and penalties prescribed in this subtitle after notice to the responsible party and an opportunity for hearing. It is the responsibility of the responsible party adequately to control and remove the discharge consistent with the National Contingency Plan. Upon failure, inability or delay of the responsible party adequately to control and remove the pollutant, the Federal on scene coordinator, in cooperation with the Secretary, in the exercise of his discretion and in cooperation with other Federal, State, or local agencies or in cooperation with the responsible party, or both, shall have the right to accomplish the control and removal at the expense of the responsible party. Funds contained in the Coastal Plain Liability and Reclamation Fund, provided for by section 331 of this subtitle, may be used to accomplish such control and removal until such time as sufficient funds can be recovered from the responsible party. The removal costs and damages referred to in this subsection are the following—

(1) all removal costs incurred by the United States;

(2) damages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage, which shall be recoverable by the Secretary for damages to Federal natural resources or the State of Alaska for damages to State natural resources;

(3) damages for injury to, or economic loss resulting from destruction of, real or personal property, which shall be recoverable by a claimant who owns or leases that property;

(4) damages for loss of subsistence use of natural resources, which shall be recoverable by any claimant who so uses natural resources which have been injured, destroyed, or lost, without regard to the ownership or management of the resources;

(5) damages equal to the net loss of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources, which shall be recoverable by the Secretary, where such damages are associated with Federal natural resources, or the State of Alaska, where such damages are associated with State natural resources;

(6) damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources, which shall be recoverable by any claimant; and

(7) damages for net costs of providing increased or additional public services during or after the removal activities, including protection from fire, safety, or health hazards, caused by the discharge, which shall be recoverable by the Secretary, the State of Alaska, or a political subdivision of that State.

With respect to any removal costs and damages recoverable under this subtitle from the Fund or any other Federal compensation and liability fund, until the Fund has been exhausted, no claimant may bring an action for removal costs or damages available under such other funds.

(h)(1) An action for damages under this subtitle shall be barred unless the action is brought within three years after—

(A) the date on which the loss and the connection of the loss with the discharge in question are reasonably discoverable with the exercise of due care, or

(B) in the case of natural resource damages under subsection (g), the date of completion of the natural resources damage assessment.

(2) An action for recovery of removal costs referred to in subsection (g) must be commenced within three years after completion of the removal action.

JUDICIAL REVIEW

SEC. 319. Any complaint filed seeking judicial review of an action of the Secretary in promulgating any regulation under this subtitle may be filed only in the United States Court of Appeals for the District of Columbia, and such complaint shall be filed within ninety days from the date of such promulgation, or after such date if such complaint is based solely on grounds arising after such ninetieth day, in which case the complaint must be filed within ninety days after the complainant knew or reasonably should have known of the grounds for the complaint. Except as provided in section 321, any complaint seeking judicial review of any other actions of the Secretary under this subtitle may be filed in any appropriate district court of the United States, and such complaint must be filed within ninety days from the date of the action being challenged, or after such date if such complaint is based solely on grounds arising after such ninetieth day, in which case the complaint must be filed within ninety days after the complainant knew or reasonably should have known of the grounds for the complaint. Action of the Secretary with respect to which review could have been obtained under this section shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

ANNUAL REPORT TO CONGRESS

SEC. 320. On March 1 of each year following the date of enactment of this subtitle, the Secretary shall prepare and submit to the Congress an annual report on the leasing program authorized by this subtitle.

INTERESTS OF ARCTIC SLOPE REGIONAL CORPORATION AND KAKTOVIK CORPORATION

SEC. 321. (a) The prohibitions and limitations contained in section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) insofar as they have application to lands or interests therein owned by the Arctic Slope Regional Corporation and the Kaktovik Inupiat Corporation within the Arctic National Wildlife Refuge, but outside the Coastal Plain, are repealed.

(b) The prohibitions and limitations contained in section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) insofar as they have application to lands or interests therein owned by the Arctic Slope Regional Corporation and the Kaktovik Inupiat Corporation within the Coastal Plain are repealed as of the day after the first lease sale is held pursuant to this subtitle. With respect to the lands and interests therein described in this subsection, no exploratory drilling activities shall be authorized until the day after such lease sale.

(c) The substantive provisions of the final regulations issued pursuant to this subtitle which establish environmental stipulations, terms, and conditions for oil and gas leasing on the Coastal Plain shall apply to the exploration and development of all subsurface property interests owned by the Arctic Slope Regional Corporation within the Arctic National Wildlife Refuge: *Provided*, That prior to issuance of such regulations, oil and gas exploration and development activities on the land and interests therein described in subsection (a), shall be governed by the stipulations set forth in appendix 2 of the August 9, 1983, agreement between the Arctic Slope Regional Corporation and the United States.

(d) Any claims for money damages brought by Arctic Slope Regional Corporation or Kaktovik Inupiat Corporation alleging that the provisions of this subtitle constitute a taking of property rights under the fifth amendment to the Constitution of the United States may be brought within one hundred and twenty days of its enactment. A claim shall be barred unless a complaint is filed within the time specified. Any such complaint shall be filed in the United States Claims Court in accordance with section 1491 of title 28, United States Code. Any such proceeding shall be assigned for hearing at the earliest possible date, shall take precedence over all other matters pending on the docket of the district court at that time, and shall be expedited in every way by such court. Any review of an interlocutory or final judgment, decree, or order of such district court may be had only upon direct appeal to the Supreme Court of the United States.

PART 4—COASTAL PLAIN ENVIRONMENTAL PROTECTION

NO SIGNIFICANT ADVERSE EFFECT STANDARD TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES

SEC. 322. (a) The Secretary shall administer this subtitle through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions designed to ensure that the oil and gas exploration, development, and production activities on the Coastal Plain will be conducted in a manner that avoids significant adverse effect on fish and wildlife, their habitat, and the environment. Activities conducted under this subtitle shall not be subject to findings or determinations of compatibility by the Secretary under the National Wildlife Refuge System Administration Act.

(b) The Secretary shall also require, with respect to any proposed drilling and related activities, that—

(1) a site-specific assessment be made of the probable effects, if any, that the drilling or related activities will have on fish and wildlife, their habitat, and the environment;

(2) a plan be implemented to mitigate any adverse effect assessed under paragraph (1) of this subsection; and

(3) the development of the mitigation plan shall occur after consultation with the agency or agencies having jurisdiction over matters mitigated by the plan.

REGULATIONS TO PROTECT THE COASTAL PLAIN'S FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS AND THE ENVIRONMENT

SEC. 323. (a) Prior to implementing the leasing program authorized by part 3 of this subtitle, the Secretary shall prepare and promulgate regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures designed to ensure that the activities undertaken in the Coastal Plain authorized by this subtitle are conducted in a manner consistent with the purposes and environmental requirements of this subtitle.

(b) The proposed regulations, lease terms, conditions, restrictions, prohibitions, and stipulations for the leasing program authorized by part 3 of this subtitle shall require compliance with all applicable provisions of Federal and State environmental law and shall also require—

(1) as the Secretary deems appropriate, the safety and environmental mitigation measures set forth in items one through twenty-nine at pages 167 through 169 of the "Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain;

(2) seasonal limitations on exploration, development and related activities, where necessary, to avoid significant adverse effects during periods of concentrated fish and wildlife breeding, denning, nesting, spawning, and migration;

(3) that exploration activities, except for surface geological and geophysical studies, be limited to the period between approximately November 1 and May 1 and that exploration activities will be supported by ice roads, winter trails with adequate snow cover, ice pads, ice airstrips, air transport methods, or any other method that would be at least as protective of the environment as the aforementioned: *Provided*, That such exploration activities may be permitted at other times if the Secretary determines, after affording an opportunity for public comment and review, that special circumstances exist necessitating that exploration activities be conducted at other times of the year and the Secretary finds that such exploration will have no significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain;

(4) design safety and construction performance standards for all pipelines and any access and service roads that—

(A) minimize adverse effects upon the passage of migratory species such as caribou to the maximum extent practicable; and

(B) minimize adverse effects upon the flow of surface water by requiring the use of culverts, bridges and other structural devices;

(5) prohibitions or restrictions on public access and use on all airfields, pipeline access, and service roads;

(6) stringent reclamation and rehabilitation requirements, consistent with the standards set forth in this subtitle, requiring the removal from the Coastal Plain of all oil and gas development and production facilities, structures and equipment upon completion of oil and gas production operations: *Provided*, That the Secretary may exempt from the requirements of this paragraph those facilities, structures or equipment which the Secretary determines would assist in the management of the Arctic National Wildlife Refuge and which are donated to the United States for that purpose;

(7) appropriate prohibitions or restrictions on access by all modes of transportation;

(8) appropriate prohibitions or restrictions on sand and gravel extraction;

(9) consolidation of facility siting;

(10) appropriate prohibitions or restrictions on use of explosives;

(11) avoidance, to the extent practicable, of springs, streams and river systems; the protection of natural surface drainage patterns, wetlands, and riparian habitats; and the regulation of methods or techniques for developing or transporting adequate supplies of water for exploratory drilling;

(12) avoidance or reduction of air traffic-related disturbances of fish and wildlife;

(13) treatment and disposal of hazardous and toxic wastes, solid wastes, reserve pit fluids, drilling mud and cuttings, and domestic wastewater, in accordance with applicable Federal and State environmental law;

(14) fuel storage and oil spill contingency planning;

(15) research, monitoring and reporting requirements;

(16) field crew environmental briefings;

(17) minimization of adverse effect on subsistence hunting, fishing, and trapping by subsistence users;

(18) compliance with applicable air and water quality standards;

(19) appropriate seasonal and safety zone designations around well sites within which subsistence hunting and trapping would be limited;

(20) reasonable stipulations for protection of cultural and archaeological resources; and

(21) all other protective environmental stipulations, restrictions, terms, and conditions deemed necessary by the Secretary.

(c) In preparing and promulgating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Secretary shall consider—

(1) the environmental protection standards which governed the initial Coastal Plain exploration program (50 Code of Federal Regulations 37.31–33);

(2) the land use stipulations for exploratory drilling on the KIC–ASRC private lands which are set forth in appendix 2 of the August 9, 1983, agreement between Arctic Slope Regional Corporation and the United States; and

(3) the operational stipulations for Koniag ANWR Interest lands contained in the draft agreement between Koniag, Incorporated and the United

States of America on file with the Secretary on January 19, 1989.

SADLEROCHIT SPRING SPECIAL AREA

SEC. 324. (a)(1) The Sadlerochit Spring Special Area, comprising approximately four thousand acres as depicted on the map referenced in section 303 of this subtitle, is hereby designated to be a special area. Such special area shall be managed so as to protect and preserve the area's unique and diverse character including its fish, wildlife, and subsistence resource values.

(2) Pursuant to subsection (d) of section 307 of this subtitle, the Secretary may exclude the Sadlerochit Spring Special Area from leasing.

(3) In the event that the Secretary leases the Sadlerochit Spring Special Area, or any part thereof, for purposes of oil and gas exploration, development, production, and related activities, there shall be no surface occupancy of the lands comprising the Special Area.

(b) The Secretary is authorized to designate other areas of the Coastal Plain as Special Areas if the Secretary determines that they are of unique character and interest so as to require such special protection. The Secretary shall notify the Committee on Energy and Natural Resources of the United States Senate and the Committee on Interior and Insular Affairs of the United States House of Representatives of the Secretary's intent to designate such areas ninety days in advance of making such designations. Any such areas designated as special areas shall be managed in accordance with the standards set forth in subsection (a) of this section.

FACILITY CONSOLIDATED PLANNING

SEC. 325. (a) The Secretary shall, after providing for public notice and comment, prepare and update periodically a plan to govern, guide, and direct the siting and construction of facilities for the exploration, development, production, and transportation of Coastal Plain oil and gas resources. This plan shall have the following objectives—

(1) avoiding unnecessary duplication of facilities and activities;

(2) encouraging consolidation of common facilities and activities;

(3) locating or confining facilities and activities to areas which will minimize impact on fish and wildlife, their habitat, and the environment;

(4) utilizing existing facilities wherever practicable; and

(5) enhancing compatibility between wildlife values and development activities.

(b) The plan prepared under this section shall supplement any comprehensive conservation plan prepared pursuant to the requirements of section 304(g) of the Alaska

National Interest Lands Conservation Act of 1980 (94 Stat. 2394).

RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN

SEC. 326. The Secretary is authorized to grant under section 28 of the Mineral Leasing Act (30 U.S.C. 185) rights-of-way and easements across the Coastal Plain for the transportation of oil and gas under such terms and conditions as may be necessary so as not to result in a significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain. Such terms and conditions shall include requirements that facilities be sited or modified so as to avoid unnecessary duplication of roads and pipelines. The regulations issued pursuant to this subtitle shall include provisions regarding the granting of rights-of-way across the Coastal Plain. The provisions of title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161 et seq.) and the provisions of the National Wildlife Refuge System Administration Act relating to rights-of-way and easements shall not apply to rights-of-way and easements across the Coastal Plain.

ENVIRONMENTAL STUDIES

SEC. 327. In addition to any other environmental studies required by law, subsequent to exploring or developing any area or region of the Coastal Plain, the Secretary shall conduct such additional studies to establish environmental information as the Secretary deems necessary, and shall monitor the human, marine, and coastal environments of such area or region in a manner designed to provide information which can be used for comparison with any previously collected data for the purpose of identifying any effects on the fish or wildlife and their habitat and any significant changes in the quality and productivity of such environments, for establishing trends in the areas studied and monitored, and for designing experiments to identify the causes of such effects or changes.

ENFORCEMENT OF SAFETY AND ENVIRONMENTAL REGULATIONS

SEC. 328. (a) The Secretary shall diligently enforce all regulations, lease terms, conditions, restrictions, prohibitions, and stipulations promulgated pursuant to this subtitle.

(b) It shall be the responsibility of any holder of a lease under this subtitle to—

(1) maintain all operations within such lease area in compliance with regulations intended to protect persons and property on, and fish and wildlife, their habitat, and the environment of, the Coastal Plain; and

(2) allow prompt access at the site of any operations subject to regulation under this subtitle to any appropriate Federal or State inspector, and to

provide such documents and records which are pertinent to occupational or public health, safety, or environmental protection, as may be requested.

(c) The Secretary shall promulgate regulations to provide for—

(1) scheduled onsite inspection by the Secretary, at least twice a year, of each facility on the Coastal Plain which is subject to any environmental or safety regulation promulgated pursuant to this subtitle or such provisions contained in any lease issued pursuant to this subtitle to assure compliance with such environmental or safety regulations; and

(2) periodic onsite inspection by the Secretary at least once a year without advance notice to the operator of such facility to assure compliance with all environmental or safety regulations.

PART 5—LAND RECLAMATION AND RECLAMATION LIABILITY FUND

LAND RECLAMATION

SEC. 329. The holder of a lease or leases on lands within the Coastal Plain shall be fully responsible and liable for the reclamation of lands within the Coastal Plain and any other Federal lands adversely affected in connection with exploration, development, or transportation activities on a lease within the Coastal Plain. The holder of a lease shall also be responsible for conducting any land reclamation required as a result of activities conducted on the lease by any of the lease holder's subcontractors or agents. The holder of a lease may not delegate or convey, by contract or otherwise, this responsibility and liability to another party without the express written approval of the Secretary.

STANDARD TO GOVERN LAND RECLAMATION

SEC. 330. The standard to govern the reclamation of lands required to be reclaimed under this subtitle, following their temporary disturbance or upon the conclusion of their use of prolonged commercial production of oil and gas and related activities, shall be reclamation and restoration to a condition capable of supporting the uses which the lands were capable of supporting prior to any exploration, development, or production activities, or upon application by the lessee, to a higher or better use as approved by the Secretary; except that in the case of roads, drill pads, and other gravel foundation structures, reclamation and restoration shall be to a condition as closely approximating the original condition of such lands as is feasible. Reclamation of lands shall be conducted in a manner that will not itself impair or cause significant adverse effects on fish or wildlife, their habitat, or the environment.

COASTAL PLAIN LIABILITY AND RECLAMATION FUND

SEC. 331. (a) Within six months of a commercial discovery within the Coastal Plain, the Secretary shall establish the Coastal Plain Liability and Reclamation Fund (the "Reclamation Fund").

(b) The Secretary shall collect from the operator a fee of 0.5 cents per barrel on commercially produced crude oil from the Coastal Plain at the time and point where such crude oil first leaves the Coastal Plain. The collection of the fee shall cease when $50,000,000 has been accumulated in the Reclamation Fund, and it shall be resumed at any time that the accumulation of revenue in the Reclamation Fund falls below $45,000,000.

(c) All revenues collected under subsection (b) shall be paid into the Reclamation Fund. The Secretary is authorized to pay, to the extent provided in annual appropriation Acts, reasonable costs of administration of the Reclamation Fund from the revenues in the Reclamation Fund. All sums not needed for administration of the Reclamation Fund or making authorized payments out of the Reclamation Fund shall be invested by the Secretary of the Treasury, at the request of the Secretary, in public debt securities with maturities suitable to the needs of the Reclamation Fund, as determined by the Secretary, and bearing interest at rates determined by the Secretary of the Treasury, taking into consideration current market yields on outstanding marketable obligations of the United States of comparable maturity. Income from such securities shall be added to the principal of the Reclamation Fund.

(d) The revenues in the Reclamation Fund shall be available, to the extent provided in annual appropriations Acts and with the approval of the Secretary, for the following purposes:

(1) oil removal costs incurred by the United States;

(2) to compensate promptly any person or entity, public or private, for any direct damages caused by oil and gas exploration, development and production activities on or in the vicinity of the Coastal Plain;

(3) to reclaim any area of the Coastal Plain not reclaimed in accordance with the standard set forth in section 330 of this subtitle, by the operator or the holder of a lease or leases;

(4) up to $15,000,000 annually to reclaim and restore—

(A) any area of the Arctic National Wildlife Refuge or other North Slope Federal lands affected by past or future oil and gas exploration, development, or production; and

(B) North Slope non-Federal lands affected by future exploration, development, or production on the Coastal Plain which are not reclaimed and restored in accordance with applicable Federal law and with applicable State law not in conflict with Federal law;

(5) up to $2,000,000 annually to the Secretary to monitor and conduct research on fish and wildlife species which utilize the land and water resources of the Coastal Plain; and

(6) to reclaim at the conclusion of the period of exploration, development, and production with respect to any lease, any area of the Coastal Plain and related lands which have not been properly reclaimed by the operator or lease holder.

(e) The United States shall have legal recourse against any party or entity who is responsible for the reclamation of any area within the Coastal Plain, to recover any funds expended under paragraphs (1), (2), (3), (4), and (6) of this subsection due to a failure by the responsible party to reclaim such area as required by this subtitle: *Provided*, That such right of recovery shall not be available against any Alaska Natives conducting traditional subsistence use activities. Any funds so recovered shall be deposited in the Reclamation Fund.

(f) Any moneys remaining in the Reclamation Fund fifty years after the period of active oil and gas exploration, development, production, and reclamation has been concluded in the Coastal Plain shall be paid into the miscellaneous receipts of the Treasury of the United States.

PART 6—DISPOSITION OF OIL AND GAS REVENUES

DISTRIBUTION OF REVENUES

SEC. 332. Notwithstanding any other provision of law, all revenues received from competitive bids, sales, bonuses, royalties, rents, fees (other than those fees collected pursuant to section 310(d)(2)(A) and section 331(b) of this subtitle), interest charges, or other income derived from the leasing of oil and gas resources within the Arctic National Wildlife Refuge, shall be deposited into the miscellaneous receipts of the Treasury of the United States.

JUDICIAL REVIEW

SEC. 333. (a) Notwithstanding section 319 of this subtitle, any legal action, including an action for declaratory judgment, to challenge section 332 of this subtitle, shall be assigned for hearing and completed at the earliest possible date; shall, to the greatest extent practicable, take precedence over all other matters pending on the docket of the court at that time; and shall be expedited in every way by such court. Any such action shall be brought in an appropriate United States district court within ninety days of enactment of this subtitle. Such action shall be barred unless a complaint is filed within the time specified. Any review of an interlocutory or final judgment, decree, or order of the United States district court in such action may be had only upon direct appeal to the Supreme Court of the United States.

(b) Nothing in this section shall be construed to grant causes of action to any person or to waive any defenses which may be available to the United States.

(c) If any action is brought in accordance with subsection (a), no lease sale shall occur under section 307 of this subtitle until a final nonappealable decision has been issued in any such action.

SUBTITLE B—NAVAL PETROLEUM RESERVE LEASING

SHORT TITLE

SEC. 341. This subtitle may be cited as the "Naval Petroleum Reserve Leasing Act".

LEASING AUTHORIZATION

SEC. 342. (a) Notwithstanding any other law, if the President finds that control and use of Naval Petroleum Reserve Numbered 1 by the United States is not necessary for national defense purposes or to assure its exploration, development, and operation, the Secretary of Energy (the "Secretary") may lease any or all of that reserve. As determined by the Secretary, portions of chapter 641 of title

10, United States Code, shall cease to apply with respect to the reserve from the effective date to be specified in a lease, and to the extent and under conditions that may be provided for elsewhere in this subtitle.

(b) The President shall submit a finding under this section to the Congress, together with a report on the basis for the finding, at least sixty days before the effective date of a lease of the reserve.

(c)(1) The Secretary may use the United States share of lease proceeds received to satisfy contractual obligations directly related to the accomplishment of a lease and to pay any liabilities of the Department of Energy arising with respect to the interests leased at Naval Petroleum Reserve Numbered 1 and with respect to the settlement of issues under the Unit Plan Contract at Naval Petroleum Reserve Numbered 1, including any liabilities relating to payment of just compensation and under any Federal statute concerning the environment. The balance of funds received shall be utilized as provided in section 346 of this subtitle.

(2) Before entering into a lease under this subtitle, the Secretary shall determine that the rental price represents fair market value.

(d)(1) The Secretary shall notify the Attorney General of each proposed lease under this subtitle. The notification shall contain information that the Attorney General may require in order to advise the Secretary as to whether the lease may substantially lessen competition. Within thirty days after the notification, the Attorney General shall advise the Secretary whether the lease may substantially lessen competition.

(2) Nothing in this subtitle confers on any person immunity from civil or criminal liability, or creates defenses to actions, under the antitrust laws.

(3) As used in this section, the term "antitrust laws" means—

(A) the Sherman Act (15 U.S.C. 1 et seq.):

(B) the Clayton Act (15 U.S.C. 12 et seq.);

(C) the Federal Trade Commission Act (15 U.S.C. 41 et seq.);

(D) sections 73 and 74 of the Wilson Tariff Act (15 U.S.C. 8 and 9); and

(E) the Act of June 19, 1936, chapter 592 (15 U.S.C. 13, 13a, 13g, and 21a, commonly referred to as the "Robinson-Patman Act").

(e) The Secretary shall conduct a leasing action under this subtitle using competitive procedures and may reject any and all offers or bids for leases even if the offers or bids meet or exceed minimum acceptable levels.

(f) Any lease under this subtitle shall require that a royalty payment equal to not less than 12.5 percent of the value, as determined by the Secretary, of the oil, natural gas, and other hydrocarbon resources of the production removed or sold from the lease be paid to the "Naval Petroleum Reserve Lease Proceeds Special Account," provided for in section 346 of this subtitle.

(g) Any lease contract authorized under this subtitle shall be so structured as to require parties leasing the reserve or any interest in the reserve to—

(1) retain all records pertaining to the production, transportation and sale of production for a period of not less than 6 years, or such longer period as the Secretary by notice may require;

(2) make all such records available to the Secretary for audit; and

(3) provide that, in the event of late payment of royalties, partial payment of royalties, or failure to pay any royalties due, the Secretary shall require the payment of interest and penalties and may cancel the lease.

(h) Any lease authorized under this subtitle shall be so structured as to require parties leasing the reserve to set aside a portion of the crude oil produced to sell to small refiners for processing or use in such refineries except that—

(1) none of the production sold to small refiners may be resold in kind;

(2) production must be sold at a cost of not less than the prevailing local market price of comparable petroleum; and

(3) the set-aside portion shall not exceed 25 percent of the estimated annual production at the reserve.

PROCEDURES TO ARRANGE AND CONDUCT A LEASING ACTION

SEC. 343. (a) Before and after the President's finding under section 342(a) of this Act, the Secretary may take the steps the Secretary considers necessary to arrange the lease of Naval Petroleum Reserve Numbered 1.

(b) In order to arrange and conduct a leasing action, the Secretary may:

(1) create new corporations, partnerships, or other business entities, and transfer the United States' interest to the new entities;

(2) enter into contracts with State or private entities, including contracts for technical, financial, auditing or other professional services; and

(3) use funds appropriated to the Department of Energy under the Department of the Interior and

Related Agencies Appropriations Acts, but not to exceed 5 per centum from the Naval Petroleum Reserves account.

Resources and expertise of other Federal agencies shall be used to lease the Reserve when doing so will reduce the cost to the Federal Government of leasing.

(c) Unless otherwise determined in accordance with section 342(e), all lands to be leased shall be leased to the highest responsible qualified bidder or bidders by competitive bidding under general regulations issued by the Secretary. The Secretary may establish bidding and lease terms and conditions the Secretary considers necessary or appropriate, including, but not limited to, the establishment of the acreage and units of lands to be leased and the minimum rental or royalty rates.

(d) A lessee of any of the United States' interest in Naval Petroleum Reserve Numbered 1 is not liable for any claim of liability arising exclusively from or during the ownership and operation of the interest by the United States. Such a claim may be asserted only against the United States to the extent and in the manner provided by law.

PRIVATELY OWNED LANDS AND PHYSICAL IMPROVEMENTS

SEC. 344. (a) Whenever the Secretary is otherwise unable to make arrangements the Secretary considers satisfactory for a lease of Naval Petroleum Reserve Numbered 1, the Secretary may acquire, by purchase, condemnation, or otherwise, privately owned lands or physical improvements within Naval Petroleum Reserve Numbered 1, as the Secretary considers necessary to facilitate the leasing action.

(b) Before condemnation proceedings are instituted, an effort shall be made to acquire the property by negotiation, unless, in the judgment of the Secretary, the effort to acquire the property by negotiation would be futile, unduly time consuming, or otherwise not in the public interest.

STRATEGIC PETROLEUM RESERVE TIE-IN; DEFENSE PETROLEUM INVENTORY

SEC. 345. (a) In the event of a lease of any part of Naval Petroleum Reserve Numbered 1 under this subtitle, sections 160 (a), (b), and (d) of the Energy Policy and Conservation Act (42 U.S.C. 6240 (a), (b) and (d)) shall cease to apply to the reserve.

(b)(1) Title I, part B, of the Energy Policy and Conservation Act (42 U.S.C. 6215 et seq.) is amended by adding after section 167 a new section 168 as follows:

"DEFENSE PETROLEUM INVENTORY

"SEC. 168. (a) Notwithstanding any other provision of this part, the Secretary may acquire or construct, operate, and maintain storage and related facilities to meet petroleum product requirements of the Department of Defense, and may acquire and store therein a Defense Petroleum Inventory of crude oil. This acquisition and storage shall be in addition to any acquisition or storage of crude oil for the Strategic Petroleum Reserve required by any other law, and crude oil acquired and stored under this section shall not be counted as part of the Strategic Petroleum Reserve. In carrying out the functions authorized by this section, the Secretary may exercise any authority available under this part.

"(b) The Secretary shall obligate the United States share of funds available in the Naval Petroleum Reserve Lease Proceeds Special Account created by section 346 of the Naval Petroleum Reserve Leasing Act for the acquisition of ten million barrels of crude oil for the Defense Petroleum Inventory. Until the acquisition of ten million barrels of crude oil for the Defense Petroleum Inventory has been completed, the Secretary shall dedicate to the Defense Petroleum Inventory, crude oil contained in the Strategic Petroleum Reserve in sufficient quantities to maintain the Defense Petroleum Inventory at a level determined by multiplying ten million barrels times the percentage of the United States' interest in Naval Petroleum Reserve Numbered 1 leased under the Naval Petroleum Reserve Leasing Act. Any crude oil so dedicated shall be considered to remain in storage for the purposes of any law relating to the rate of fill of the Strategic Petroleum Reserve.

"(c) Notwithstanding any other provision of this part, upon the request of the Secretary of Defense, crude oil acquired for or dedicated to the Defense Petroleum Inventory shall be drawn down and distributed by the Secretary to, or on behalf of, the Department of Defense for use, sale, or exchange. Crude oil in the Defense Petroleum Inventory may be drawn down and distributed, used, sold, or exchanged, without regard to—

"(1) whether the crude oil has been commingled with petroleum products of the Strategic Petroleum Reserve;

"(2) the requirements of this part concerning drawdown of the Strategic Petroleum Reserve; or

"(3) otherwise applicable Federal contracting statutes and regulations.

The Secretary of Energy shall exercise the authority provided by this subsection in a manner which does not adversely affect drawdown of the Strategic Petroleum Reserve.

"(d) Upon the request of the Secretary of Defense, and subject to the availability of funds from the Department of Defense, the Secretary shall acquire and store in the Defense Petroleum Inventory crude oil to replace crude oil drawn down under subsection (c).

"(e) An amendment to the Strategic Petroleum Reserve Plan relating to the exercise of this authority shall not be required.

"(f) The Department of Defense shall reimburse the Department of Energy for—

"(1) drawdown and distribution services provided under this section, in amounts that the Secretary determines to be reasonable;

"(2) all costs of acquiring crude oil for the Strategic Petroleum Reserve to replace crude oil drawn down and distributed under subsection (c); and

"(3) all costs of acquiring and storing in the Defense Petroleum Inventory any crude oil in excess of the initial ten million barrels acquired for it or dedicated to it.

"(g) Crude oil acquired for the Defense Petroleum Inventory under subsection (a) shall be transferred to the Strategic Petroleum Reserve, pursuant to subsection (f)(2), in reimbursement on a barrel-for-barrel basis for the cost of replacement petroleum products acquired for the Strategic Petroleum Reserve.".

(2) The Table of Contents of the Energy Policy and Conservation Act is amended by inserting after the entry for section 167 the following:

"Sec. 168. Defense Petroleum Inventory.".

NAVAL PETROLEUM RESERVE LEASE PROCEEDS SPECIAL ACCOUNT AND REVENUE SHARING WITH THE STATE OF CALIFORNIA

SEC. 346. (a) There is established in the Treasury of the United States a fund called the "Naval Petroleum Reserve Lease Proceeds Special Account" (referred to as the "Special Account" in this subtitle) which shall be available to the Department of Energy without fiscal year limitation to carry out the purposes, functions, and powers authorized by this subtitle.

(b) There shall be deposited in the Special Account all proceeds realized under this subtitle from the lease of all or any part of the United States' interest in Naval Petroleum Reserved Numbered 1, including bonus and royalty payments.

(c) Fifty per centum of the proceeds received from royalty payments and seven percent of the bonus payments from Naval Petroleum Reserve Numbered 1 under this subtitle shall, notwithstanding any other provision of law, be paid to the State of California (to be credited by the State in accordance with California Public Resources Code, section 8711 and allocated in the manner provided in California Statutes 1988 ch. 985, section 3, as amended from time to time). The portion of the proceeds accruing to the State of California from the bonus payment shall be paid to the State of California in seven annual payments, beginning one year from the date that the Federal Government receives the first installment of the bonus payment. No interest shall be due on these amounts to the State. Each of the seven annual payments shall be equal to one seventh of the lease bonus payment due to the State.

(d) The Secretary may make expenditures from the Special Account without further appropriation and without fiscal year limitation, but within specific directives or limitations that may be included in appropriation Acts, for any purposes necessary or appropriate to carry out section 168(b) of the Energy Policy and Conservation Act or to satisfy obligations related to the lease of Naval Petroleum Reserve Numbered 1 as specified in section 342(c)(1).

(e)(1) Upon a written notification from the Secretary to the Secretary of the Treasury that the Special Account contains funds in excess of the amounts considered necessary to fulfill the purposes specified in subsections (c) and (d), excess funds specified by the Secretary may be transferred from the Special Account to the miscellaneous receipts account of the Treasury of the United States. In the event funds are no longer required to fulfill the purposes specified in subsections (c), and (d), the Special Account shall be abolished and all remaining funds credited to the miscellaneous receipts account of the Treasury of the United States.

(2) Following abolition of the Special Account under subsection (e)(1), proceeds realized under this subtitle from the lease of all or any part of the United States' interest in Naval Petroleum Reserve Numbered 1 shall be deposited in the miscellaneous receipts account of the Treasury of the United States; except for the portion of royalty, interest and bonus payments specified in section 346(c) to be paid to the State of California, which shall continue to be paid to that State regardless of the status of the Special Account.

(f) The Secretary may collect lease proceeds on behalf of any private owner of Naval Petroleum Reserve Numbered 1 and may pay the owner its share of lease proceeds.

CONGRESSIONAL CONSULTATION

SEC. 347. Compliance with the procedures specified in sections 342(b) and (d) of this subtitle is considered to satisfy the requirements of section 7431(a) and 7431(b) of title 10, United States Code.

EFFECT ON SCHOOL LANDS GRANT

SEC. 348. (a) The authority to lease under this subtitle extends to sections 16 and 36 within Naval Petroleum Reserve Numbered 1.

(b) A payment may be made under section 346(c) of this subtitle only after—

(1) the State of California files, on behalf of all party plaintiffs, a motion to dismiss, with prejudice, the lawsuit it filed against the United States and certain agency officials in November 1987 in the United States District Court, Eastern District of California (No. CV–F–87–665–EDP), and

(2) the State of California, by written agreement, forfeits any rights under section 6 of the Act of March 3, 1853 (chapter CXLV; 10 Stat. 246) to sections 16 and 36, township 30 south, range 23 East, Mount Diablo base line and Meridian, located within Elk Hills, including all rights to indemnity lands under revised statutes 2275 and 2276 (43 U.S.C. 851 and 852).

The agreement referred to in paragraph (2) of this subsection is subject to the concurrence of the Attorney General of the United States.

CONFORMING AMENDMENTS

SEC. 349. (a) Section 501 of Public Law 101–45 (103 Stat. 103) is repealed.

(b) Sections 7422 (a) and (b) of title 10, United States Code, are amended to read as follows:

"(a) The Secretary, directly or by contract, lease, or otherwise, shall explore, prospect, conserve, develop, use, and operate the naval petroleum reserves in his discretion, subject to the provisions of this chapter, except the authority to lease is not extended to Naval Petroleum Reserve Numbered 3.

"(b) Except as otherwise provided in this chapter, particularly subsection (c) of this section, and in the Naval Petroleum Reserve Leasing Act, the naval petroleum reserves shall be used and operated for—

"(1) the protection, conservation, maintenance, and testing of those reserves; or

"(2) the production of petroleum whenever and to the extent that the Secretary, with the approval of the President, finds that such production is needed for national defense purposes and the production is authorized by a joint resolution of Congress.".

(c) Section 7422(c)(1)(B) of title 10, United States Code, is amended to read as follows:

"(B) to produce such reserves at the maximum efficient rate consistent with sound engineering practices.".

(d) Sections 7422(c)(1)(C), 7422(c)(2), and 7426 (b), (c), (d), and (e) of title 10, United States Code, are repealed.

(e) Section 7430(a) of title 10, United States Code, is amended to read as follows:

"(a) In administering the naval petroleum reserves under this chapter, except for those reserves covered by leases executed pursuant to the Naval Petroleum Reserve Leasing Act, the Secretary shall use, store, or sell the petroleum produced from the naval petroleum reserves and lands covered by joint, unit, or other cooperative plans as provided in this section.".

(f) Section 7430(b)(1) of title 10, United States Code, is amended by striking "paragraph (2) and notwithstanding any other provision of law" and inserting "subsection (a) and paragraph (2)".

(g) Section 7430(f) of title 10, United States Code, is amended to read as follows:

"(f) The consultation and approval requirements of section 7431(a)(3) are waived for contracts to sell petroleum produced from Naval Petroleum Reserves Numbered 1, 2, and 3, and for contracts to sell petroleum from the Naval Oil Shale Reserves which is produced for their exploration, protection, conservation, maintenance, and testing.".

(h) Section 7430(l)(1) of title 10, United States Code is amended to read as follows:

"(l)(1) The Secretary, at the request of the Secretary of Defense, may provide any portion of the United States share of petroleum to the Department of Defense for its use, exchange, or sale in order to meet petroleum product requirements of the Department of Defense.".

(i) Section 7431(a) of title 10, United States Code, is amended by adding "Except for actions taken pursuant to the Naval Petroleum Reserve Leasing Act," at the beginning of the subsection.

(j) Sections 7431 (b) and (c) of title 10, United States Code, are amended by striking "During the period of production authorized by section 7422(c) of this title, the" and inserting "The".

(k) Section 7433(b) of title 10, United States Code, is amended to read as follows:

"(b) Except as provided in the Naval Petroleum Reserve Leasing Act, all money accruing to the United States from lands in the naval petroleum reserves shall be covered into the Treasury.".

Subtitle C—Oil Pipeline Deregulation

SHORT TITLE

SEC. 351. This subtitle may be cited as the "Oil Pipeline Regulatory Reform Act."

FINDINGS AND PURPOSES

SEC. 352. (a) The Congress finds that—

(1) oil pipelines are of critical strategic and economic importance to the Nation;

(2) the Nation's interests are best served by encouraging the competitive and efficient operation of oil pipelines;

(3) economic regulation can impose unproductive costs, discourage and distort investment decisions, cause regulatory uncertainty, and often be only partially effective in achieving its goals;

(4) most markets served by oil pipelines are sufficiently competitive that, given application of the antitrust laws, economic regulation of pipelines in these markets is unnecessary to ensure reasonable rates and adequate service;

(5) for those oil pipeline markets for which competition and antitrust enforcement are not sufficient to ensure their efficient operation, continued economic regulation may be necessary to prevent abuse of significant market power;

(6) where continued economic regulation of oil pipelines remains necessary, the regulation must be reformed to maximize reliance on competition to benefit consumers, reduce regulatory costs, and en-

courage the efficient use and development of existing and new pipelines;

(7) for those oil pipeline markets for which continued economic regulation is necessary, consumers can best be protected, costs of regulation can best be reduced, and efficiency can best be enhanced by regulating the maximum rates that pipelines may charge and adjusting the maximum rates to reflect price changes in competitive markets while allowing pipelines freely to discount below those maximum rates; and

(8) this reformed rate regulation in markets in which there is significant market power will provide just compensation to a pipeline if the allowable rate is comparable to what that rate would be if the market were competitive and not subject to market power, as calculated by a method that establishes maximum rates, permits them to be revised if they had been enhanced by market power, and adjusts them over time by an index reflecting pipeline prices in competitive markets.

(b) It therefore is the policy of the Federal Government—

(1) to remove the burden of economic regulation from those oil pipeline markets that operate

under competitive circumstances or for which that regulation would not be an effective or efficient remedy to constrain the exercise of market power; and

(2) to provide for continued economic regulation of only those oil pipeline markets for which regulation will increase economic efficiency and for which the benefits of regulation outweigh its costs.

REGULATORY REFORM AND DEREGULATION

SEC. 353. The Department of Energy Organization Act (42 U.S.C. 7101–7352) is amended by adding after section 407 the following new sections:

"REGULATION OF PIPELINES

"SEC. 408. (a) As used in this section and sections 409 and 410—

"(1) 'adjudication' means an agency hearing, which, in the discretion of the Secretary, may be a hearing on the record governed by section 554 of title 5, United States Code;

"(2) 'Attorney General' means the Attorney General of the United States or the Attorney General's designee;

"(3) 'Commission rate regulation' means those functions and authorities set forth in section 410 of this Act;

"(4) 'existing Commission regulatory jurisdiction' means those functions and authorities transferred by sections 306 and 402(b) of the Department of Energy Organization Act (42 U.S.C. 7155, 7172(b));

"(5) 'existing pipeline' means a pipeline that was brought into service or was under construction before January 1, 1991;

"(6) 'interested person' means a person whose economic or business interests would be substantially affected by a finding that Commission rate regulation is in the public interest or that a base rate should be revised;

"(7) 'new pipeline' means a pipeline that was brought into service after January 1, 1991, and was not under construction before January 1, 1991;

"(8) 'pipeline' means a pipeline subject to existing Commission regulatory jurisdiction or which would be subject to existing Commission regulatory jurisdiction except for this section, but it does not include the Trans-Alaska Pipeline authorized by the Trans-Alaska Pipeline Authorization Act (43 U.S.C. 1651 et seq.) or a pipeline directly or indirectly delivering oil to the Trans-Alaska Pipeline; and

"(9) 'rate' means the price for transportation by pipeline, including all charges that the pipeline requires its customers to pay for the transportation and for any ancillary services set forth as part of that pipeline's tariff on file with the Commission on January 1, 1991, or approved by the Commission after January 1, 1991.

"(b)(1) Existing Commission regulatory jurisdiction over pipelines terminates sixty days after the effective date of the Oil Pipeline Regulatory Reform Act. On that date, pipelines become subject to sections 408, 409, 410, and 411 of this Act.

"(2)(A) Within one hundred twenty days after the effective date of the Oil Pipeline Regulatory Reform Act, the Attorney General may petition the Secretary for an adjudication of whether Commission rate regulation of an existing pipeline in any market is in the public interest. Upon receipt of such a petition, the Secretary shall conduct an adjudication in accordance with subsection (b)(3). In deciding whether to bring a petition, the Attorney General shall be guided by the methods, assumptions, standards, and definitions underlying and set forth in the report of the United States Department of Justice dated May 1986 entitled "Oil Pipeline Deregulation." None of the findings and conclusions of the report, and none of the methods, assumptions, standards, and definitions underlying and set forth in the report are binding on the Secretary in an adjudication conducted under this section.

"(B) Within one hundred eighty days after the effective date of the Oil Pipeline Regulatory Reform Act, an interested person may petition the Secretary for an adjudication of whether Commission rate regulation of an existing pipeline in any market is not in the public interest. A person filing such a petition shall provide a reasonable basis for the conclusion that Commission rate regulation is in the public interest, and shall serve a copy of the petition on the Attorney General and on the pipeline for which Commission rate regulation is sought. Upon receipt of the petition, the Secretary, for good cause shown, may conduct an adjudication in accordance with subsection (b)(3). The Secretary may consult with the Attorney General in deciding whether to conduct an adjudication, and shall conduct an adjudication in accordance with subsection (b)(3) if the Attorney General so recommends.

"(C) Not later than two hundred seventy days after the effective date of the Oil Pipeline Regulatory Reform Act, the Secretary shall publish a list of all adjudications that the Secretary has determined will be held pursuant to this subsection, identifying in each case the pipeline and the market for which Commission rate regulation is sought. Pipeline rates for service to markets that are not identified in the list published by the Secretary shall no longer be subject to section 410 of this Act.

"(3)(A) The Secretary shall find that Commission rate regulation of an existing pipeline in a market is in the public interest only if it is demonstrated that regulation is necessary to constrain the exercise of substantial market power in the supply or demand of products transported by the pipeline in that market. If the Secretary finds that Commission rate regulation of an existing pipeline in a market is not in the public interest, Commission rate regulation shall continue. If the Secretary finds that Commission rate regulation of an existing pipeline in a market is not in the public interest, regulation shall terminate at a time the Secretary designates, but in no event shall that regulation continue beyond sixty days after the Secretary issues the finding.

"(B) A finding under subsection (b)(3)(A) shall be issued within one year after the Secretary decides to conduct the adjudication, unless the Secretary, in the event of unusual circumstances, determines that the finding cannot be issued within one year. In such a case, the Secretary shall make specific findings as to the unusual circumstances necessitating the delay, and shall specify a date certain by which the Secretary will issue the finding, but in no event shall the Secretary's finding be issued more than two years after the Secretary decides to conduct the adjudication.

"(C) If parties to an adjudication conducted by the Secretary reach a settlement of the issues prior to the Secretary's finding that Commission rate regulation of a pipeline in a market is in the public interest, the settlement shall bind those parties. If all parties reach such a settlement, the Secretary shall terminate the proceeding by accepting the settlement.

"(c)(1) Upon petition of any interested person, the Secretary may conduct an adjudication of whether Commission rate regulation of an existing pipeline in any market subject to that regulation is in the public interest in accordance with subsection (b)(3). The Secretary shall notify the Attorney General of any petition for adjudication or decision to conduct an adjudication under this paragraph and may consult with the Attorney General in deciding whether to conduct an adjudication.

"(2) If the Secretary finds that Commission rate regulation of an existing pipeline in a market subject to that regulation is not in the public interest, Commission rate regulation over that pipeline in that market terminates when the Secretary designates, but in no event shall Commission rate regulation continue beyond sixty days after the Secretary issues the finding.

"(d) The Attorney General may participate in any adjudication initiated by petition from any interested person under this section, or upon the request of the Secretary. In participating, the Attorney General shall be guided by the methods, assumptions, standards, and definitions set forth in the report cited in section 408(b)(2)(A).

"(e) Except as provided under subsection (i), new pipelines are not subject to existing Commission regulatory jurisdiction or to Commission rate regulation, but are subject to section 409 of this Act.

"(f)(1) The termination pursuant to this section of existing Commission regulatory jurisdiction or Commission rate regulation does not apply to products transported before the termination.

"(2) Commission rate regulation of a pipeline in a market made subject to that regulation under this section shall be prospective only. Products transported by the pipeline before regulation becomes effective under this section shall not be subject to Commission rate regulation.

"(3) Existing Commission regulatory jurisdiction terminated under this section, including existing Commission regulatory jurisdiction over new pipelines, shall not revert back to, be delegated to, or otherwise transfer to, the Department of Energy, the Interstate Commerce Commission, or any other agency of the Federal Government except as provided under subsection (i).

"(4) Notwithstanding any other law, and except as otherwise provided in section 409 and 410 of this Act, no State, political subdivision of a State, or agency of the Federal Government may regulate a pipeline with respect to which existing Commission regulatory jurisdiction or Commission rate regulation has been terminated pursuant to this section, including existing Commission regulatory jurisdiction and Commission rate regulation over new pipelines, to the extent that the regulation is similar in nature to those functions and authorities constituting existing Commission regulatory jurisdiction or Commission rate regulation that are terminated under this section. This authority includes, but is not limited to, subsections 5(e) and 5(f) of the Outer Continental Shelf Lands Act (43 U.S.C. 1334 (e) and (f)) and section 28(r) of the Mineral Leasing Act of 1920 (30 U.S.C 185(r)). Nothing in this Act limits any authority vested in a State or political subdivision of a State to regulate pipelines engaged in intrastate commerce.

"(g) Notwithstanding section 501 of this Act (42 U.S.C. 7191), the Secretary and the Attorney General each may promulgate, in accordance with section 553 of title 5, United States Code, rules and regulations necessary or appropriate to carry out their respective responsibilities under this section. Rules and regulations proposed by the Secretary implementing this section or any other actions taken by the Secretary under this section are not subject to section 404 of this Act (42 U.S.C. 7174).

"(h)(1) Notwithstanding section 502 of this Act (42 U.S.C. 7192), the United States Court of Appeals for the District of Columbia Circuit has exclusive original jurisdiction over any petition for judicial review under this section.

"(2) Any action of the Attorney General under this section, including without limitation any participation of the Attorney General in any adjudication under this section, is an agency action committed to agency discretion by law, and is not subject to judicial review in any manner.

"(i)(1) The Secretary of Defense may petition the Secretary for an adjudication of whether Commission rate regulation of an unregulated pipeline would be in the national defense interest, except that the Secretary of Defense may not petition the Secretary earlier than two years after—

"(A) the termination of Commission rate regulation of a pipeline that is the subject of the petition, or

"(B) a prior adjudication under this section regarding a pipeline that is the subject of the petition.

"(2) In response to a petition under this subsection, the Secretary may hold an adjudication of whether Commission rate regulation of an unregulated pipeline would be in the national defense interest. If the Secretary finds that Commission rate regulation of the pipeline is in the national defense interest, the pipeline shall be subject to section 410 of this Act.

"COMMON CARRIER STATUS CONTINUED; CONTRACTS

"SEC. 409. (a) Notwithstanding any other provision of this Act, pipelines shall operate as common carriers, as follows:

"(1) provide transportation service to all persons upon reasonable demand and upon fair, equitable, and nondiscriminatory terms and conditions and establish through routes with other common carrier pipelines, except that a pipeline's charging different rates to different shippers does not constitute a violation of this paragraph;

"(2) establish and observe just and reasonable classifications of property for transportation and just and reasonable regulations and practices affecting that transportation, except that a pipeline's charging different rates to different shippers does not constitute a violation of this paragraph;

"(3) refrain from disclosing to any person, other than the shipper or consignee, without consent of the shipper or consignee, any information concerning the nature, kind, quantity, destination, consignee, or routing of any property tendered or delivered.

"(b) Pipelines shall publish and file with the Commission schedules setting forth applicable terms and conditions of carriage, but excluding the rates to be charged for carriage.

"(c) Contracts between pipelines and other persons on terms and conditions other than those filed pursuant to subsection (b) as applicable to basic common carriage shall be presumed conclusively to be in the public interest as long as, in regulated markets, the regulated service is available at no more than the maximum rate.

"(d) The Commission shall enforce compliance with the obligations set forth in this section, and may adopt rules and regulations necessary or appropriate for that purpose.

"COMMISSION RATE REGULATION

"SEC. 410. (a) Notwithstanding any other law, the rates of any pipeline in any market subject to this section shall be regulated as follows:

"(1) The base rates of a pipeline in any market subject to this section are;

"(A) those rates that were in effect and not subject to investigation by the Commission on January 1, 1991, increased or reduced by the percentage change in the Producer Price Index for total finished goods calculated by the Bureau of Labor Statistics in the United States Department of Labor from that date to the date that Commission rate regulation commenced pursuant to section 408(b)(1);

"(B) with respect to rates that were subject to investigation by the Commission on January 1, 1991, which investigation was not terminated by final adjudication or settlement approved by the Commission as of the termination of existing Commission regulatory jurisdiction pursuant to section 408(b)(1), those rates that were in effect upon the last rate change prior to January 1, 1991, that was not made subject to an investigation by the Commission, increased or reduced by the percentage change in the Producer Price Index from the effective date of that change to the date that Commission rate regulation commenced pursuant to section 408(b)(1);

"(C) with respect to rates that were subject to investigation by the Commission on or before January 1, 1991, which investigation was terminated by a final adjudication or a settlement approved by the Commission prior to the termination of existing Commission regulatory jurisdiction pursuant to section 408(b)(1), those finally adjudicated or settled rates, increased or reduced by the percentage change in the Producer Price Index from the effective date of the final adjudication or settlement to the date that Commission rate regulation commenced pursuant to section 408(b)(1);

"(D) with respect to pipelines not in service on January 1, 1991, those rates initially established by those pipelines.

"(2) The base rate for a pipeline subject to this section may be modified as follows—

"(A) Within one hundred and twenty days after a finding by the Secretary pursuant to section 408(b) that Commission rate regulation of any pipeline in any market is in the public interest, the Attorney General may petition the Secretary for an adjudication of whether any base rate of that pipeline in that market should be reduced. Upon receipt of such a petition, the Secretary shall conduct an adjudication in accordance with subsection (a)(2)(D) of this section.

"(B) Within one hundred and eighty days after a public interest finding, an interested person may petition the Secretary for an adjudication of whether any base rate of that pipeline in that market should be reduced. A person filing such a petition shall provide a reasonable basis for the conclusion that the base rate should be reduced, and shall serve a copy of the petition on the Attorney General and on the pipeline that is the subject of the petition. Upon receipt of such a petition, the Secretary, for good cause shown, may conduct an adjudication in accordance with subsection (a)(2)(D). The Secretary may consult with the Attorney General in deciding whether to conduct an adjudication, and shall conduct an adjudication if the Attorney General so recommends.

"(C) Not later than two hundred and seventy days after a public interest finding, the Secretary shall publish a list of all adjudications that the Secretary has determined will be held pursuant to this paragraph, identifying in each case the pipeline, the market, and the base rate for which a reduction is sought.

"(D)(i) The Secretary shall order a reduction if the petitioner demonstrates that the pipeline's market power has resulted in a base rate that is significantly higher than the rate likely would be if the relevant market were not subject to market power. In making this finding, the Secretary shall consider only statistical evidence of rates charged by that pipeline in competitive markets, with appropriate recognition of the effects of factors such as the distance of a movement. For purposes of this subparagraph, a base rate is considered significantly higher than the rate likely would be if the relevant market were not subject to market power only if the difference is statistically significant under commonly accepted standards.

"(ii) A finding under clause (i) of this subparagraph shall be issued within one year after the Secretary decides to conduct an adjudication, unless the Secretary, in the event of unusual circumstances, determines that the finding cannot be issued within one year. In such a case, the Secretary shall make specific findings as to the unusual circumstances necessitating the delay, and shall specify a date certain by which the Secretary will issue the finding, but in no event shall the Secretary's finding be issued more than two years after the Secretary decides to conduct the adjudication.

"(iii) If parties to an adjudication conducted by the Secretary reach a settlement of the issues prior to the Secretary's finding, it shall bind those parties. If all parties reach such a settlement, the Secretary shall terminate the proceeding by accepting the settlement.

"(E) Any adjustment of a base rate ordered under this subsection shall be effective as of the date of the Secretary's finding pursuant to subsection (a)(2)(D)(ii).

"(F) The Attorney General may participate in any adjudication initiated by petition from any interested person under this section, and shall participate upon the request of the Secretary. In participating, the Attorney General shall be guided by the methods, assumptions, standards, and definitions set forth in the report cited in section 408(b)(2)(A).

"(3) The Commission shall calculate as follows a maximum rate for each rate subject to Commission rate regulation:

"(A) Following the commencement of Commission rate regulation pursuant to subsection 408(b)(1)—

"(i) For the first period, which shall be from the commencement of Commission rate regulation pursuant to subsection 408(b)(1) until the date of publication by the Secretary of the list of adjudications required by subsection 408(b)(2)(C), the maximum rate shall be the base rate established under section 410(a) (1) and (2).

"(ii) For each of the next two periods, each of which shall be six months, the maximum rate for pipeline rates serving markets which are subject to an adjudication shall be the base rate increased or reduced by the percentage change in the Producer Price Index from the date upon which the base rate became effective.

"(iii) For all subsequent six month periods, the maximum rate shall be the prior maximum rate increased or reduced by the percentage change in the Competitive Pipeline Price Index during the previous period, except that, with respect to a settlement approved by the Commission after January 1, 1991, which expressly governs maximum rates for any future period, the settlement rate shall be the maximum rate until the conclusion of that period. At the conclusion of that period, the rate in effect shall be the maximum rate increased or reduced by the percentage change in the Competitive Pipeline Price Index.

"(B)(i) The Secretary shall calculate a Competitive Pipeline Price Index to reflect relative changes in prices charged by pipelines in competitive markets not subject to Commission rate regulation. The Competitive Pipeline Price Index shall be derived from the average revenue per barrel-mile of a sample of pipelines in those markets. The Secretary shall select the sample of pipelines, markets, and revenues to be used in calculating the Competitive Pipeline Price Index, and the Secretary may exclude data from pipelines not subject to Commission rate regulation but whose rates for any reason may reflect effective competition. The Secretary may require reports from pipelines for the purpose of calculating the Competitive Pipeline Pirce Index.

"(ii) The Secretary shall initially publish the Competitive Pipeline Price Index one year after the termination of existing Commission regulatory jurisdiction, and shall publish changes in it at intervals of not more than six months.

"(iii) The Secretary may substitute an appropriate existing index for the Competitive Pipeline Price Index if that substitute index accurately reflects increases in prices in competitive pipeline markets and if the Secretary determines that calculation of the Competitive Pipeline Price Index would be unduly burdensome.

"(4)(A) Any rate subject to Commission rate regulation under this section which does not exceed the maximum rate determined in accordance with subsection (a)(3) of this section is presumed conclusively to be lawful and is not subject to protest, complaint, suspension, investigation, or any other challenge or inquiry under Commission rate regulation.

"(B) Nothing in this Act makes it unlawful for a pipeline to charge a rate that is lower than the maximum rate determined in accordance with subsection (a)(3). A pipeline charging lower than the maximum rate to a shipper with which it is affiliated by means of common ownership or otherwise shall make the lower rate available to any shipper upon the same terms and conditions of service.

"(5) The Commission shall publish base rates, rate adjustments, and maximum rates determined in accordance with this section and make them available for public inspection.

"(b) A pipeline subject to Commission rate regulation in a market shall not condition pipeline services in that market on entering into any other transaction, or on taking or refraining from any action.

"(c)(1) In any market subject to Commission rate regulation, if a pipeline expands its available capacity, it may petition the Commission for a determination of the pre-existing capacity that will remain subject to Commission rate regulation. If such a determination is made, the additional capacity shall not be subject to Commission rate regulation. Interested persons may particiapte in the proceeding.

"(2) The Commission may promulgate any regulations necessary or appropriate to ensure that rights to use pre-existing capacity at rates governed by Commission rate regulation are allocated to shippers in a manner that both preserves the efficacy of Commission rate regulation of preexisting capacity and is consistent with the requirements of section 409 of this Act.

"(d) The Commission shall enforce compliance with the obligations set forth in this section, and may adopt rules and regulations necessary or appropriate for that purpose.

"(e) Nothwithstanding section 501 of this Act (42 U.S.C. 7191), the Secretary and the Attorney General each may promulgate in accordance with section 553 of title 5, United States Code, rules and regulations necessary or appropriate to carry out their respective responsibilities under this section. Rules and regulations proposed by the Secretary implementing this section or any other actions taken by the Secretary under this section are not subject to section 404 of this Act (42 U.S.C. 7174).

"(f)(1) Notwithstanding section 502 of this Act (42 U.S.C. 7192), the United States Court of Appeals for the District of Columbia Circuit has exclusive original jurisdiction over any petition for judicial review under this section.

"(2) Any action of the Attorney General under this section, including without limitation any decision to petition or not to petition for an adjudication under this section, is an agency action committed to agency discretion by law, and is not subject to judicial review in any manner.

"REPORT TO CONGRESS

"SEC. 411. At the conclusion of the fifth year after the completion of all adjudications conducted under section 410 of this Act, the Secretary shall provide to the appropriate committees of Congress a report setting forth the findings and conclusions of the Secretary on the results of the Oil Pipeline Regulatory Reform Act and its impact on the public interest. In this report, the Secretary shall make any recommendations that the Secretary considers appropriate.".

CONFORMING AMENDMENTS

SEC. 354. (a) Section 402(b) of the Department of Energy Organization Act (42 U.S.C. 7172(b)), is amended by striking "There" and inserting in its place "Subject to sections 408, 409, 410, and 411 of this Act, there".

(b) Section 404(a) of the Department of Energy Organization Act (42 U.S.C. 7174(a)) is amended by striking "section 403" and by inserting in its place "sections 408 and 410".

(c) The Table of Contents of the Department of Energy Organization Act is amended by adding after the item for section 407 four new items as follows: "Sec. 408. Regulation of pipelines.", "Sec. 409. Common carrier status continued; contracts.", "Sec. 410. Commission rate regulation.", and "Sec. 411. Report to Congress.".

APPLICABILITY OF ANTITRUST LAWS

SEC. 355. Nothing in this Act affects the applicability to the transportation by pipeline of crude oil, refined oil, or other petroleum products of the laws of the United States relating to unlawful restraints and monopolies and to combinations, contracts, or agreements in restraint of trade.

SEVERABILITY

SEC. 356. If any provision of this Act or its application to any person or circumstances is held invalid, neither the remainder of this Act nor the application of the provision to other persons or circumstances shall be affected.

TITLE IV—ELECTRICITY GENERATION AND USE

Subtitle A—Public Utility Holding Company Act Reform

Definitions

SEC. 401. For the purposes of this subtitle—

(1) "Exempt wholesale generator" means any person who is engaged directly, or indirectly, through one or more of that person's affiliates as de-

fined under section 2(a)(11)(B) of the Act, exclusively in the business of owning or operating all or part of one or more eligible facilities and selling electric energy at wholesale. The term excludes a registered holding company affiliate in existence on the date of enactment of the National Energy Strategy Act, unless the Commission has consented to its inclusion.

(2) "Eligible facility" means a facility, wherever located, that is used for the generation of electric energy exclusively for sale at wholesale (including interconnecting transmission facilities necessary to effect sale at wholesale). For purposes of sections 401 and 402, "facility" includes a portion of a facility. This term does not include a facility if a rate or a charge for, or in connection with, its construction or for electricity it produces (other than any portion of a rate or charge that represents recovery of the cost of a wholesale rate or charge) is in effect under the laws of any State.

(3) "Electric consumer" means any person, State or local authority or agency, or Federal agency to which electric energy is sold other than for purposes of resale.

(4) As used in sections 401 and 402, "the Act" means the Public Utility Holding Company Act. All of the terms used in sections 401 and 402 and defined in the Act have the meaning given in the Act.

EXEMPT WHOLESALE GENERATORS

SEC. 402. (a) An exempt wholesale generator is not considered an "electric utility company" under section 2(a)(3) of the Act and, whether or not a subsidiary company, an affiliate, or an associate company of a holding company, is exempt from the Act.

(b) Notwithstanding any provision of the Act, the eligibility of a holding company for exemption under section 3(a) of the Act is not affected by whether an associate company, affiliate, or subsidiary company is an exempt wholesale generator, unless the Commission, by order upon application of an affected State commission or other interested party, and considering among other relevant factors any views submitted by each affected State commission, terminates the exemption upon determining that—

(1) the holding company has not established appropriate means to determine the allocation of costs between the exempt wholesale generator and any associate company, affiliate, or subsidiary company that provides electric service to electric consumers; or

(2) the exempt wholesale generator is a party to a contract, either directly or through an associate company, for the sale of electric energy to an associate company, affiliate, or subsidiary company that provides electric service to electric consumers without each affected State commission having given its prior approval of the contract under State law.

(c) For the purposes of this section, an "affected State commission" is any State commission that has jurisdiction to regulate a holding company's associate company, affiliate, or subsidiary company that provides electric service to electric consumers.

(d) Notwithstanding any provision of the Act and the Commission's jurisdiction under subsection (e) of this section, a registered holding company may acquire and hold, directly, or indirectly, the securities, or interest in the business, of one or more exempt wholesale generators without applying for or receiving approval from the Commission and without being subject to any other conditions under the Act, so long as the exempt wholesale generator is not a party to a contract, either directly or through an associate company, for the sale of electric energy to an associate company, affiliate, or subsidiary company that provides electric service to electric consumers, unless each affected State commission has given its prior approval of the contract under State law.

(e) The director or indirect issuance of securities by a registered holding company for purposes of financing the acquisition of an exempt wholesale generator; the direct or indirect guarantee of securities of an exempt wholesale generator by a registered holding company; the direct or indirect entering into service, sales, or construction contracts; and the direct or indirect creation or maintenance of any other relationship in addition to that described in subsection (9) between an exempt wholesale generator and a registered holding company, its affiliates, and associate companies, remain subject to the jurisdiction of the Commission under the Act, except that—

(1) section 11 of the Act does not prohibit the ownership of an interest in the business of one or more exempt wholesale generators by a registered holding company (regardless of the location of facilities owned or operated by the exempt wholesale generator), and that ownership is considered to be consistent with the operation of an integrated public utility system; and

(2) the ownership of an interest in the business of one or more exempt wholesale generators by a registered holding company (regardless of the loca-

tion of facilities owned or operated by the exempt wholesale generator) is considered to be reasonably incidental, or economically necessary or appropriate to the operations of an integrated public utility system.

OWNERSHIP OF EXEMPT WHOLESALE GENERATORS AND QUALIFYING FACILITES

SEC. 403. The ownership by a person of one or more exempt wholesale generators does not result in that person being considered as being primarily engaged in the generation or sale of electric power within the meaning of sections 3(17)(C)(ii) and 3(18)(B)(ii) of the Federal Power Act (16 U.S.C. 796(17)(C)(ii) and (18)(B)(ii)).

FEDERAL AND STATE AUTHORITIES

SEC. 404. (a) A rate or charge for the sale of electric energy at wholesale in interstate commerce by an exempt wholesale generator is not considered just and reasonable within the meaning of sections 205 and 206 of the Federal Power Act (16 U.S.C. 824d and 824e) if the rate or charge allows the exempt wholesale generator to receive undue advantage from the existence of an affiliate relationship between the exempt wholesale generator and the purchaser of that electric energy.

(b) A State commission may determine the prudence of a wholesale power purchase by an electric utility company that provides electric service to electric consumers and may disallow recovery of costs determined to be imprudently incurred, unless the wholesale purchaser has no alternative to accepting the amount of power or costs allocated to it by the Federal Energy Regulatory Commission in setting a wholesale rate or charge that is based on an allocation of power or costs among—

(i) companies of a registered holding company; or

(ii) companies that operate on an integrated basis under an agreement approved by the Federal Energy Regulatory Commission.

Subtitle B—Power Marketing Administration Repayment Reform

SHORT TITLE

SEC. 411. This subtitle may be cited as the Power Marketing Administration Timely Payment Act.

DEFINITIONS

SEC. 412. For purposes of this subtitle—

(1) "Power marketing administration" means the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, and the Western Area Power Administration.

(2) "Power investment" means a capital investment or other capitalized expenditure made by the United States that—

(A) is made using Federal appropriations;

(B) is for a project or separable feature of a project that is placed in service;

(C) is allocated to power and required by law to be repaid from the power revenues of a power marketing administration;

(D) is not allocated or suballocated to irrigation; and

(E) excludes an investment made using funds borrowed under section 13 of the Federal Columbia River Transmission System Act (16 U.S.C. 838k).

(3) "Interest rate" means—

(A) for power investments placed in service after September 30, 1991, a rate determined by the Secretary of the Treasury based on the average market yields on outstanding marketable obligations of the United States with the remaining periods to maturity comparable to the applicable repayment period during the month preceding the fiscal year in which the power investment is placed in service; and

(B) for power investments placed in service before October 1, 1991, the yield of long-term government securities for the year the power investment was placed in service, as shown in the following table:

Year	Yield
1921	5.90
1922	4.30
1923	4.36
1924	4.06
1925	3.86
1926	3.68
1927	3.34
1928	3.33
1929	3.60
1930	3.29
1931	3.34
1932	3.68
1933	3.31
1934	3.12
1935	2.79
1936	2.65
1937	2.68
1938	2.56
1939	2.36
1940	2.21
1941	1.95
1942	2.46
1943	2.47
1944	2.48
1945	2.37
1946	2.19
1947	2.25
1948	2.44
1949	2.31
1950	2.32
1951	2.57
1952	2.68
1953	2.95
1954	2.55
1955	2.84
1956	3.08
1957	3.47
1958	3.43
1959	4.07
1960	4.02
1961	3.90
1962	3.95
1963	4.00
1964	4.15
1965	4.21
1966	4.65
1967	4.85
1968	5.26
1969	6.12
1970	6.58
1971	5.74
1972	5.64
1973	6.31
1974	6.98

1975	7.00
1976	6.78
1977	7.06
1978	7.89
1979	8.74
1980	10.81
1981	12.87
1982	12.23
1983	10.84
1984	11.99
1985	10.75
1986	8.14
1987	8.63
1988	8.98
1989	8.59
1990	8.50
1991	8.50

(4) "Compound-interest repayment schedule" means a series of level annual payments of the principal and interest on the power investment paid over the repayment period. For each power investment, the level annual payment of principal and interest is derived by dividing the unpaid principal balance of the power investment by the interest factor for the present value of an annuity.

REPAYMENT OF PRINCIPAL

SEC. 413. (a) Notwithstanding any other law, each power marketing administration shall provide for timely repayment to the Treasury of the United States of principal for power investments. A repayment of principal, to be made at or before the end of each fiscal year, shall be in an amount that is not less than would be determined under a compound-interest repayment schedule as defined in section 412(4) for each power investment, with the schedule beginning on October 1, 1991, or the date the investment is placed in service, whichever is later. In computing the compound-interest repayment schedule—

(1) for each power investment placed in service after September 30, 1991, the repayment period for the unpaid power investment is the estimated average service life of the investment, as determined by the power marketing administration, not to exceed 50 years; and

(2) for each power investment placed in service before October 1, 1991, the repayment period for the unpaid power investment is the remaining average service life of the power investment or the number of years remaining in a 50 year repayment period which started on the date the power investment was placed in service, whichever is less.

(b) If in any year the principal payments made are more than the annual scheduled amounts, the excess payment shall be credited toward payments required in subsequent years. Until a power marketing administration, at its discretion, credits the excess payment toward payments in subsequent years, the excess payment accrues an interest credit at a rate as calculated in section 414(c).

(c) Bonneville Power Administration's payments of principal as specified by this section and interest as specified by section 414 of this Act are payable exclusively from

Bonneville Power Administration's "net proceeds" as that term is defined in section 13(b) of the Federal Columbia River Transmission System Act (16 U.S.C. 838k(b)), after deducting Bonneville Power Administration's payments under section 11(b)(8) of the Federal Columbia River Transmission System Act (16 U.S.C. 838i(b)(8)).

PAYMENT OF INTEREST

SEC. 414. (a) Notwithstanding any other law, each power marketing administration shall provide for the timely payment to the Treasury of the United States, at or before the end of each fiscal year, of interest on the unpaid principal of power investments, and of interest on any unpaid deferrals of principal and interest payments.

(b) The annual interest payments on the unpaid principal of power investments shall be computed based on the interest rate determined under section 412(3).

(c) If in any year the interest or principal payments made are less than the amounts scheduled under this Act, the short-fall shall be accounted for separately and paid before the scheduled payment in subsequent fiscal years together with interest calculated at a rate determined by the Secretary of the Treasury based on average market yields on outstanding marketable obligations of the United States with remaining periods to maturity of one year occurring during the last month of the fiscal year in which the shortfall occurred. A shortfall in principal or interest payments shall not affect the payment schedule for subsequent years, except as provided in section 415.

CHANGING A SCHEDULE OF PAYMENTS

SEC. 415. Notwithstanding any other law, a power marketing administration may establish a new schedule of payments of principal and interest on an unpaid power investment when there is a significant reduction in the availability of hydro-power resources because of unexpected natural events. Before changing a schedule of payments, in whole or in part, a power marketing administration shall submit a justification for the change to the Federal Energy Regulatory Commission for approval. Within 30 days from receipt of all necessary justification documents, the Federal Energy Regulatory Commission shall approve or reject a power marketing administration's request for a change in the schedule of payments. Interest on a rescheduled payment, even if the rescheduling is approved by the Federal Energy Regulatory Commission, shall be paid in accordance with section 414 of this Act. This section does not apply to the Bonneville Power Administration.

EFFECTIVE DATE

SEC. 416. This subtitle takes effect October 1, 1991:

TITLE V—NUCLEAR POWER

Subtitle A—Licensing Reform

COMBINED LICENSES

SEC. 501. (a) Section 185 of the Atomic Energy Act of 1954 (42 U.S.C. 2235) is amended by—

(1) adding "and Operating Licenses" after "Permits" in the catchline;

(2) adding a subsection designator "a." before "All"; and

(3) adding the following new subsections:

"b.(1) After holding a public hearing under section 189 of this Act, the Commission shall issue to the applicant a combined construction and operating license if the application contains sufficient information to support the issuance of a combined license and the Commission determines that there is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of this Act, and the Commission's rules and regulations. The Commission shall identify within the combined license the inspections, tests, and analyses that the licensee shall perform, and the acceptance criteria that the Commission shall use to determine their satisfactory completion.

"(2)(A) An application for a combined license shall include a State, local, or utility emergency plan. The combined license shall identify the inspections, tests, exercises, and analyses required for the emergency plan and the acceptance criteria for their satisfactory completion.

"(B) In finding reasonable assurance that adequate protective measures can and will be taken in a radiological emergency, the Commission may presume that States and localities in the emergency planning zones will use best efforts to protect their citizens by following an emergency plan determined by the Commission to be adequate.

"(C) Notwithstanding paragraph (4) of this subsection, questions which arise after combined license issuance, concerning offsite emergency planning issues relating to whether there is reasonable assurance of adequate protective measures including those from a decision by a State or locality not to participate in a previously approved State, local or utility plan, may be resolved only in a proceeding, either in response to a petition or at the initiative of the Commission, to modify or suspend operation under the combined license.

"(3) At appropriate intervals during construction or preoperational testing, the Commission shall publish in the Federal Register notices of the successful completion of inspections, tests, and analyses.

"(4)(A) Not less than one hundred twenty days before the date scheduled for initial loading of fuel into a plant by a licensee that has been issued a combined license, the Commission shall publish in the Federal Register notice of intended operation. That notice shall provide that any person whose interest may be affected by operation of the plant, may within thirty days request the Commission to hold a hearing on whether the facility as constructed complied, or on completion will comply, with the acceptance criteria of the license.

"(B) A request for a hearing under this paragraph shall show, prima facie, that one or more or the acceptance criteria in the combined license have not been, or will not be, met, and the specific operational consequences of nonconformance that would be contrary to adequate protection of the public health and safety.

"(C) After receiving a request for a hearing under this paragraph, the Commission expeditiously shall either deny or grant the request. If a hearing is held, commencement of plant operation shall not be delayed pending decision after hearing unless the Commission determines, after considering petitioners' prima facie showing and any answers thereto, that petitioners are likely to succeed on the merits and, as a result, there will not be adequate protection of the public health and safety in the interval prior to the decision.

"(D) A hearing under this paragraph shall be informal, but parties shall be allowed to offer evidence, under oath or affirmation. Discovery and cross-examination of witnesses are not permitted, but the presiding official may direct questions to any party.

"(E) The Commission shall, to the maximum possible extent, render a decision on issues raised by the hearing request within one hundred twenty days of the publication of the notice provided by subparagraph (A) or the anticipated date for initial loading of fuel into the reactor, whichever is later. Commencement of operation under a combined license is not subject to section 189(a)(1), but any final order of the Commission under this paragraph is subject to judicial review as provided in section 189(b).

"(5) The Commission also shall notify the Attorney General if significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission under section 105 c. in connection with issuance of the combined construction and operating licenses for the facility so as to warrant further review under that section under such procedures as may be established by the Commission.

"c. In acting on a request by the holder of a combined license for an amendment to the combined license, the

Commission shall apply the same procedures and criteria as it would under section 189(a) of this Act to a licensee request for an amendment to an operating license for a utilization facility. The Commission shall not delay preoperational activities or operation of a facility pending completion of a proceeding under this paragraph if the Commission determines that the amendment involves no significant hazards considerations.".

RULEMAKING

SEC. 502. The Nuclear Regulatory Commission shall propose regulations implementing this subtitle of the National Energy Strategy Act within 1 year of the date of its enactment.

CONFORMING AND TECHNICAL AMENDMENTS

SEC. 503. (a) Section 105 c.(2) of the Atomic Energy Act of 1954 is amended by inserting "or both construct and operate" after " operate" the first time it appears.

(b) Subsection 182 b. of the Atomic Energy Act of 1954 is amended to read as follows:

"b. The Advisory Committee on Reactor Safeguards shall review:

"(1) an application under section 103 or section 104 b. for a construction permit, an operating license, or a combined construction and operating license for a facility;

"(2) an application under section 104 c. for a construction permit or an operating license for a testing facility;

"(3) an application under section 104 a. or c. specifically referred to it by the Commission; or

"(4) an application for an amendment to a construction permit, to an operating license, or to a combined construction and operating license under section 103 or 104 a., b., or c. specifically referred to it by the Commission;

The Advisory Committee on Reactor Safeguards shall submit a report on the application which shall be made a part of the record of the application and be made available to the public except to the extent that security classification prevents disclosure.".

(c) Section 186 a. of the Atomic Energy Act of 1954 is amended by inserting "and 185," after "sections 182,".

(d) The table of contents of the Atomic Energy Act of 1954 (42 U.S.C. 2011 prec.) is amended by amending the item relating to section 185 to read as follows: "Sec. 185. Construction Permits and Operating Licenses."

EFFECT ON PENDING PROCEEDINGS

SEC. 504. Sections 501 through 503 of this Act apply to all proceedings pending before the Nuclear Regulatory Commission on the date of enactment of this Act.

Subtitle B—Nuclear Waste Management Repository Site Characterization

SEC. 511. Section 113(a) of the Nuclear Waste Policy Act of 1982 (42 U.S.C.10133(a)) is amended to read as follows:

"(a) IN GENERAL.—(1) The Secretary shall carry out, in accordance with this section, appropriate site characterization activities at the Yucca Mountain site. The Secretary shall consider fully the comments received under subsection (b)(2) of this section and section 112(b)(2) of this Act and shall, to the maximum extent practicable and in consultation with the Governor of the State of Nevada, conduct site characterization activities in a manner that minimizes any significant adverse environmental impacts identified in those comments or in the environmental assessment submitted under subsection (b)(1) of this section.

"(2) Notwithstanding any other law, for the purpose of site characterization activities, a Federal agency administering a law, ordinance, or regulation that imposes a requirement for a permit, license, right of way, certification, approval, or other authorization, shall administer the application of that law, ordinance, or regulation to site characterization activities conducted by the Secretary under this Act without regard to whether its administration has been or could be, delegated to a State or superseded by a comparable State law.

"(3)(A) A requirement for a permit, license, right of way, certification, approval, other authorization imposed by a State, local, or tribal law, ordinance, or regulation does not apply to site characterization activities under this Act.

"(B) The Secretary shall carry out site characterization activities under this Act notwithstanding a denial of, or refusal to act on, an application for a permit, license, right of way, certification, approval, or other authorization required by a State, local, or tribal, ordinance, or regulation.

"(4) Notwithstanding paragraph (3), in carrying out site characterization activities under this Act, the Secretary shall consider the views of State, local, and tribal officials regarding the substantive provisions of State and local laws, ordinances, and regulations.

"(5) An action to contest the constitutionality of a provision of this subsection must be brought within 60 days of the date of the enactment of the National Energy Strategy Act. A court may not enjoin site characterization activities carried out by the Secretary under this Act in an action brought to contest the constitutionality of a provision of this subsection except as part of a final judgment.

"(6) Paragraphs (2), (3), (4), and (5) of this subsection apply only to site characterization activities conducted or begun before the Secretary submits to the Commission under section 114(b) of this Act (42 U.S.C. 10134(b)) an application for a construction authorization for a repository.

"(7) The exclusion or inclusion of any provisions contained in paragraphs (2), (3), (4), or (5) of this subsection in a negotiated proposed agreement development under title IV of this Act shall not affect any determinations regarding either the reasonableness or appropriateness of such an agreement.".

MONITORED RETRIEVABLE STORAGE FACILITY

Sec. 512. Sections 145(b) and 148(d)(1) and (2) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 1065(b) and 1068(d)(1) and (2)) are repealed.

TITLE VI—RENEWABLE ENERGY

Subtitle A—Purpa Size Cap and Co-Firing Reform

Federal Power Act Definitions

Sec. 601. Section 3(17) of the Federal Power Act (16 U.S.C. 796(17)) is amended—

(1) by amending paragraph (A) to read as follows:

"(17)(A) "small power production facility" means a facility which—

"(i) is an "eligible solar, wind, waste, biomass, hydroelectric, or geothermal facility";

"(ii) is an "alternative power production facility"; or

"(iii)(I) produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination of those energy sources; and

"(II) has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than eighty megawatts;";

(2) in paragraph (E)—

(A) by inserting ", biomass, hydroelectric," after "waste" the first time it appears; and

(B) by striking "or geothermal resources, and which would otherwise not qualify as a small power production facility because of the power production capacity limitation contained in subparagraph (A)(ii)" and inserting ", biomass energy, hydroelectric power, or geothermal resources, regardless of power production capacity" in its place; and

"(3) by adding the following paragraph:

"(F) 'alternative power production facility' means a facility, regardless of power production capacity, which produces electric energy by using solar energy, wind energy, waste resources, biomass energy, hydroelectric power, or geothermal resources, but only if—

"(i) either an application for certification of the facility as a qualifying small production facility or a notice that the facility meets the requirements for qualification is submitted to the Commission;

"(ii) the electric capacity of the facility is acquired through competitive acquisition; and

"(iii) at least 50 per centum of the energy source used to produce electric energy is obtained through the use of solar, wind, waste, biomass, hydroelectric power, geothermal resources, or any combination of those energy sources.".

UTILITY PURCHASING AND EXEMPTIONS

SEC. 602. Section 210 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–3) is amended—

(1) in subsection (a),

(A) by striking "and to encourage geothermal small power production facilities of not more than 80 megawatts capacity,"; and

(B) by inserting "In the case of an alternative power production facility, these rules shall require electric utilities to offer to purchase electric capacity from such a facility only through competitive acquisition." after "resale.";

(2) in subsection (e)(2) by striking "other than a qualifying small power production facility which is an eligible solar, wind, waste, or geothermal facility as defined in section 3(17)(E) of the Federal Power Act" and inserting "other than a qualifying small power production facility which is an alternative power production facility or an eligible solar, wind, waste, biomass, hydroelectric, or geothermal facility" in its place; and

(3) in subsection (1) by inserting " "alternative power production facility", "eligible solar, wind, waste, biomass, hydroelectric, or geothermal facility", "competitive acquisition"," after " "qualifying small power producer",".

Subtitle B—Hydroelectric Power Regulatory Reform

REGULATORY REFORM

SEC. 611. Section 4 of the Federal Power Act (16 U.S.C. 797) is amended by—

"(1) inserting ", and for the purposes of subsections (h), (i), and (j), the Commission shall" after "empowered"; and

"(2) adding the following after subsection (g):

"(h) Require each applicant who files an application for a license under this part after December 31, 1992, before filing the application to consult, concerning studies to be undertaken in connection with the licensing process, with those Federal and State agencies and Indian tribes the Commission requires to be consulted and then to have the applicant submit to the Commission a plan and schedule for conducting the studies and a summary of its consultation activities. The Commission shall approve or modify the plan and schedule taking into consideration the cost of the studies, the potential value of the licensing determination of the information the studies are likely to produce, and any other factors the Commission considers relevant and shall ensure that the plan includes all studies necessary to evaluate the proposed projects. Once a plan is approved by the Commission, the Commission may modify it only after determining that the public interest would be affected if it were not modified. This determination may include a finding that additional information is needed in order to address the provisions of this Act or other applicable law. Approval of the study plan and schedule does not constitute a formal Commission decision and is not subject to appeal.

"(i) Coordinate a single, consolidated review, including review under the National Environmental Policy Act of 1969, of a hydropower project which is the subject of an application for a license under this part, by all Federal agencies, State agencies and affected Indian tribes interested in the project that is the subject of the application. The Commission shall give reasonable notice of the application and the consolidated review to all Federal agencies, State agencies, and affected Indian tribes that may be interested in the project that is the subject of the application. The Commission shall be the lead agency for purposes of compliance with the National Environmental Policy Act of 1969. A review under the National Environmental Policy Act of 1969 completed by the Commission as part of this consolidated review is the only documentation needed by an agency to satisfy the requirements of the National Environmental Policy Act of 1969 for the project subject to the review. The Commission's decision concerning issuance of a license and the terms, conditions, and prescriptions of the license shall take into account the results of the consolidated review. An agency's decision concerning its recommendations, terms, conditions, and prescriptions for the license and any approvals within its authority related to the project shall take into account the results of the consolidated review. The Commission may establish reasonable time limits for submission of recommendations, terms, conditions, prescriptions, and reports by a Federal agency, State agency, or Indian tribe as part of the consolidated review. If an agency does not meet the Commission's time limitations, the Commission may continue to process and to take any appropriate action on the application.

"(j)(1) Notwithstanding any other provision of this Act or other law, have exclusive authority to determine which recommendations, terms, conditions, prescriptions, permits, and certifications are included in a license issued under this part for a hydropower project at an existing dam or conduit. If the Commission does not adopt in whole or part a recommendation, term, condition, prescription, permit, or certification promulgated by a Federal or State agency or an Indian tribe, the Commission shall state fully its reasons for its action.

"(2) If there is a conflict between the terms of a license issued under this part for a hydropower project at an existing dam or conduit and the terms of a permit, license, certificate, or other authorization required by another Federal agency or a State agency for the same project, the terms of the license issued under this part prevail. If the hydropower project at an existing dam or conduit has been issued a license under this part and has been denied a permit, license, certificate, or other authorization by another Federal agency or a State agency, the licensee of the project may proceed under the license issued under this part.".

REMOVAL OF COMMISSION AUTHORITY OVER FIVE MEGAWATT PROJECTS

SEC. 612. Section 10(i) of the Federal Power Act (16 U.S.C. 803(i)) is amended to read as follows:

"(i)(1) A constructed or proposed hydropower project with an installed capacity of five megawatts or less that has not received a license under this part by the effective date of the National Energy Strategy Act is not subject to this part.

"(2) The licensee of a project with an installed capacity of five megawatts or less licensed under this part as of the effective date of the National Energy Strategy Act may elect not to be regulated under this part by applying to the Commission for permission to surrender the license. The Commission shall permit surrender of the license unless the Commission determines it is not in the public interest to do so.

"(3) Nothwithstanding this subsection, section 401 of the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1341) applies to a project with an installed capacity of five megawatts or less as it did before the date of enactment of the National Energy Strategy Act.".

TITLE VII—ALTERNATIVE FUEL

Subtitle A—Alternative and Dual Fuel Vehicle Credits

Alternative and Dual Fuel Cap Removal

SEC. 701. Section 513 of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2013) is amended to read as follows:

"CONSIDERATION OF CERTAIN AUTOMOBILES

"Sec. 513. In carrying out section 2002(a)(4) and (f) of this title, the Secretary shall not consider the fuel economy of alcohol powered automobiles or natural gas powered automobiles, and the Secretary shall consider dual energy automobiles and natural gas dual energy automobiles to be operated exclusively on gasoline or diesel fuel.".

Subtitle B—Alternative Transportation Fuels Definitions

SEC. 711. For the purposes of this subtitle—

(1) "alternative fuel" means methanol, ethanol, and other alcohols; mixtures containing 85 percent or more by volume of methanol, ethanol, or other al-

cohol with gasoline or other fuels; natural gas; liquid petroleum gas; hydrogen; and electricity;

(2) "alternative fuel vehicle" means a motor vehicle that—

(A) operates solely on alternative fuel, or

(B) is a flexi-fueled vehicle;

(3) "covered person" means a person to whom section 712 of this subtitle applies;

(4) "fleet" means a number of motor vehicles, all or a part of which are centrally fueled or capable of being centrally fueled, that are owned, operated, leased, or otherwise controlled by a person. This term does not include—

(A) motor vehicles held for daily lease or rental to the general public;

(B) motor vehicles held for sale by motor vehicle dealers, including demonstration vehicles;

(C) motor vehicles used for motor vehicle manufacturer product evaluations or tests;

(D) law enforcement vehicles;

(E) emergency vehicles;

(F) military tactical vehicles; or

(G) nonroad vehicles, including farm and construction vehicles;

(5) "flexi-fueled vehicle" means a motor vehicle that can operate on alternative or nonalternative fuel;

(6) "person" has the meaning given that term in section 1 of title 1, United States Code, but also includes a State government and a local government;

(7) "Secretary" means the Secretary of Energy; and

(8) "urban bus" has the meaning given that term in section 219 of the Clean Air Act (42 U.S.C. 7554).

ACQUISITION OF ALTERNATIVE FUEL VEHICLES

SEC. 712. (a)(1) This subsection applies to a person who owns, operates, leases, or otherwise controls a fleet that—

(A)(i) contains at least—

(I) ten automobiles;

(II) ten trucks, except multi-unit trucks over 26,000 pounds gross vehicle weight; or

(III) ten buses, except intercity passenger buses and urban buses; or

(IV) a combination of at least ten motor vehicles of these types; and

(ii) is located in a metropolitan statistical area or consolidated metropolitan statistical area, as established by the Bureau of the Census, with a 1980 population of more than two hundred and fifty thousand which has been classified by the Environmental Protection Agency under part D of title I of the Clean Air Act as a serious, severe or extreme nonattainment area for ozone based on 1987, 1988, and 1989 data; or

(B)(i) contains at least—

(I) twenty automobiles;

(II) twenty trucks, except multi-unit trucks over 26,000 pounds gross vehicle weight;

(III) twenty buses, except intercity passenger buses and urban buses; or

(IV) a combination of twenty motor vehicles of these types; and

(ii) is located in any metropolitan statistical area or consolidated metropolitan statistical area, as established by the Bureau of the Census, with a 1980 population of more than two hundred and fifty thousand.

(2) When a person to whom this subsection applies under paragraph (1) purchases, leases, or otherwise acquired vehicles for the fleet described in paragraph (1), in the years specified in this paragraph, the following percentage of the vehicles purchased, leased, or otherwise ac-

quired shall be alternative fuel vehicles in the respective years—

(A) in 1995, 10 per centum;

(B) in 1996, 15 per centum;

(C) in 1997, 25 per centum;

(D) in 1998, 50 per centum;

(E) in 1999, 75 per centum; and

(F) in 2000 and afterwards, 90 per centum.

(b)(1) This subsection applies to a person who owns, operates, leases, or otherwise controls a fleet that—

(A)(i) contains at least ten urban buses, except intercity passenger buses, and

(ii) is located in an area described in subsection (a)(1)(A)(ii) of this section, or

(B)(i) contains at least twenty urban buses, except intercity passenger buses, and

(ii) is located in an area described in subsection (a)(1)(B)(ii) of this section.

(2) When a person to whom this subsection applies under paragraph (1) purchases, leases, or otherwise acquires vehicles for the fleet described in paragraph (1), in the years specified in this paragraph, the following percentage of the vehicles purchased, leased, or otherwise acquired shall be alternative fuel vehicles in the respective years—

(A) in 2000, 50 percent;

(B) in 2001, 75 percent;

(C) in 2002, 80 percent; and

(D) in 2003 and thereafter, 90 percent.

EXCEPTION

SEC. 713. This subtitle does not apply to a covered person if the Secretary determines that no alternative fuel vehicles meeting the fleet requirements for that person are available for purchase, lease, or acquisition by other means when the subtitle becomes applicable to the covered person. This subtitle applies to that covered person when alternative fuel vehicles become available. This subtitle does not apply to a person subject to section 712(b) if the Secretary determines that no alternative fuel vehicle that is an urban bus complies with the warranty standards for urban buses.

CREDITS

SEC. 714. (a) The Secretary shall allocate a credit to a covered person if that person purchases an alternative fuel vehicle in excess of the number that person is required to purchase under this subtitle or purchases an alternative fuel vehicle before the date that person is required to purchase an alternative fuel vehicle under this subtitle.

(b) In allocating credits under subsection (a), the Secretary shall allocate one credit for each alternative fuel vehicle the covered person purchases that exceeds the number of alternative fuel vehicles that person is required to purchase under this subtitle or that is purchased before the date that person is required to purchase an alternative fuel vehicle under this subtitle. The credit shall be allocated for the same type of vehicle, including an urban bus, automobile, or other vehicle subject to the requirements of this subtitle, as the excess vehicle or earlier purchased vehicle.

(c) At the request of a covered person allocated a credit under this section, the Secretary shall treat the credit as the purchase of one alternative fuel vehicle of the type for which the credit is allocated in the year designated by that person when determining whether that person has complied with this subtitle in the year designated. A credit may be counted toward compliance for only one year.

(d) A covered person allocated a credit under this section or to whom a credit is transferred under this section, may transfer freely the credit to another person who is required to comply with this subtitle. At the request of the person to whom a credit is transferred, the Secretary shall treat the transferred credit as the purchase of one alternative fuel vehicle of the type for which the credit is allocated in the year designated by the person to whom the credit is transferred when determining whether that person has complied with this subtitle in the year designated. A transferred credit may be counted toward compliance for only one year.

REPORTS

SEC. 715. The Secretary may require a person to file with the Secretary the reports the Secretary determines necessary to implement this subtitle.

ENFORCEMENT

SEC. 716. (a) A person who violates a requirement or prohibition of this subtitle is subject to a civil penalty of not more than $100,000 per violation. Each month in which a violation occurs constitutes a separate violation, unless the violator establishes that the vehicle necessary to comply with this subtitle could not be purchased, leased, or otherwise acquired in that month. The first month of a violation of the yearly acquisition requirements of section 712 is the month in which a person purchases, leases, or otherwise acquires vehicles that result in noncompliance with the yearly alternative fuel vehicle purchase requirement under that section. Each month in which compliance has not been achieved after the first month is a separate violation.

(b) The Secretary may request the Attorney General to commence a civil action for a permanent or temporary injunction or to assess and recover any civil penalty under subsection (a) of this section. An action under this subsection may be brought in the district court of the United States for the district in which the violation is alleged to have occurred or in which the defendant resides or has his principal place of business. The court in which the action has been brought may restrain a violation, require compliance, assess a civil penalty, collect any noncompliance assessment and nonpayment penalty owed the United States, and award any other appropriate relief. In such an action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

(c)(1) Instead of commencing a civil action under subsection (b), the Secretary may assess an administrative penalty in the amount prescribed in subsection (a) of this section. The maximum amount of penalty sought against each violator in a proceeding under this subsection may not exceed $200,000, unless the Secretary and the Attorney General jointly determine that a larger amount is appropriate. A determination by the Secretary and the Attorney General on the appropriateness of a larger amount is not subject to judicial review.

(2) The Secretary shall assess an administrative penalty under this subsection by an order made on the record after opportunity for a hearing in accordance with sections 554 and 556 of title 5 of the United States Code. Before

issuing such an order, the Secretary shall give to the person to be assessed an administrative penalty written notice of the Secretary's proposal to issue an order. That person has 30 days from the date the notice is received to request a hearing on the order. The Secretary shall issue rules for procedures for hearings under this subsection. The Secretary may compromise, modify, or remit, with or without conditions, an administrative penalty that the Secretary imposes under this subsection.

(3) An order issued under this subsection becomes final 30 days after its issuance unless a petition for judicial review is filed under paragraph (4).

(4) Within 30 days following the date an administrative penalty is issued under this subsection, a person against whom the administrative penalty is assessed may seek review of the assessment in the United States District Court for the District of Columbia or for the district in which the violation is alleged to have occurred, the person resides, or the person's principal place of business is located. That person shall send a copy of the filing seeking review by certified mail to the Secretary and the Attorney General on the day of the filing. Within 30 days of the date the Secretary receives a copy of the filing, the Secretary shall file in the court a certified copy, or certified index, as appropriate, of the record on which the order

was issued. The court shall not set aside or remand the order unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Secretary's assessment of the penalty constitutes an abuse of discretion. In a proceeding under this subsection, the United States may seek to recover administrative penalties assessed under this subsection.

(5) If a person fails to pay an assessment of an administrative penalty imposed by the Secretary under this subsection—

(A) after the order making the assessment has become final, or

(B) after a court in an action brought under paragraph (4) has entered a final judgment in favor of the Secretary,

the Secretary shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed, plus interest at rates established under section 6621(a)(2) of the Internal Revenue Code of 1986 from the date of the final order or the date of the final judgment, as the case may be. In this action, the validity, amount, and appropriateness of the penalty is not subject to review. A person who fails to pay on a timely basis the amount of an assessment of an administrative penalty under this section shall be required to pay, in addition to the amount and interest, the United States' enforcement expenses, including but not limited to, attorneys fees and costs for collection proceedings, and a quarterly nonpayment penalty for each quarter during which the failure to pay persists. The nonpayment penalty shall be in an amount equal to 10 percent of the aggregate amount of that person's penalties and nonpayment penalties which are unpaid as of the beginning of the quarter.

(d) In determining the amount of a penalty to be assessed under this section, the Secretary or the court, as appropriate, shall take into consideration, in addition to other factors justice may require, the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

IMPLEMENTATION

SEC. 717. The Secretary of Energy shall issue regulations to implement this subtitle.

TITLE VIII-INNOVATION AND TECHNOLOGY TRANSFER

STEVENSON-WYDLER ACT AMENDMENTS

SEC. 801. (a) Section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a) is amended by adding the following new subsection after subsection (g):

"(h) COPYRIGHT OF COMPUTER SOFTWARE.—Each Federal agency may secure copyright on behalf of the United States as author or proprietor in any computer software prepared in whole or in part by employees of the United States Government in the course of work under a cooperative research and development agreement entered into under the authority of subsection (a)(1) of this section, or under any other equivalent authority, notwithstanding the limitations contained in section 105 of title 17, United States Code; and may grant or agree to grant in advance to a collaborating party, licenses or assignments for such copyrights, or options thereto, retaining a nonexclusive, nontransferable, irrevocable, paid-up license, to reproduce, adapt, translate, distribute, and publicly perform or display the computer software throughout the world by or on behalf of the Government and such other rights as the Federal agency deems appropriate.".

(b) Section 4 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3703) is amended by adding at the end the following new paragraph:

"(14) "Computer software" means a computer program, as defined in section 101 of title 17, United States Code, and any associated documentation, supporting materials, or user instructions.".

ROYALTY PAYMENTS TO AUTHORS

SEC. 802. (a) Sections 14(a)(1)(A), (14)(a)(2), and 14(a)(3) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710c (a)(1)(A), (a)(2) and (a)(3)) are amended—

(1) by inserting "or computer software" after "inventions" each place it appears;

(2) by inserting "or computer software" after "invention" each place it appears;

(3) by inserting "or author" after "inventor" each place it appears;

(4) by inserting "or co-author" after "co-inventor" each place it appears;

(5) by inserting "or authors" after "inventors" each place it appears;

(6) by inserting "or co-authors" after "co-inventors" each place it appears; and

(7) by inserting "or author's" after "inventor's" each place it appears.

(b) Section 14(a)(1)(B) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710c(a)(1)(B)) is amended—

(1) by inserting "or computer software" after "income from any invention";

(2) by inserting "or computer software was developed" after "the invention occurred";

(3) by inserting "or computer software" after "licensing of inventions" in clause (i);

(4) by inserting "or computer software which was developed" and "with respect to inventions" in clause (i); and

(5) by inserting "or computer software" after "organizations for invention" in clause (i).

(c) Section 14(c) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)) is amended by inserting "or author" after "including inventor".

TECHNICAL AND CONFORMING AMENDMENTS

SEC. 803. Section 12(c) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)) is amended by inserting "or computer software" after "inventions" each place it appears.

The CHAIRMAN. Before we hear from him, I would like to call on the distinguished ranking minority Member, Senator Wallop.

STATEMENT OF HON. MALCOLM WALLOP, U.S. SENATOR FROM WYOMING

Senator WALLOP. Thank you, Mr. Chairman. I have a statement I will insert into the record, and I will begin by again saying that it is a pleasure to work with you and Admiral Watkins, and Henson Moore, Linda Stuntz, and the rest of your staff.

Some people assume that the development of this energy strategy only began on August 2 with the invasion of Kuwait, but, in fact, this is a culmination of 18 months of hard work in which some of us have been involved. All of us have had the opportunity to offer advice and counsel, some of which has been taken and some of which has not.

It was exciting for me yesterday to be with you and the President as he announced his National Energy Strategy. I think it is fair to say that it differs not very much in thrust and philosophy from that which the Chairman and I have introduced.

It is worrisome to me that a goodly portion of the so-called conservation or environmental community seems to think that somehow or other it is wrong for American consumers to have access to the resource wealth of America. It seems unbelievable that a country so blessed with such an abundant variety of energy resources would deny itself so many of those to pinion itself on world events when we need not be. To say somehow or other that it is better that we spend the $60 billion on energy supplies that may be developed out of the Alaska National Wildlife Reserve resources instead on foreign sources of energy is unrealistic. There is this mystical dream that somehow or other that our problem can be solved entirely by corn gas and by conservation efforts.

What is impressive to me about the policy or the strategy that you announced yesterday and which is contained in Senator Johnston's and my bill, is that we can achieve a balance, that we can back out large volumes of foreign energy dependency, that we can create an ethic of conservation but we must as well look to the wealth that America possesses to solve the energy problem that America has. It is largely a self-created problem. But it is not created out of a desire to be profligate. It is created, quite the opposite, out of a desire to deny ourselves the resources and wealth that America has.

This produces jobs, it produces capital, it produces independence. When I look down the road I have to ask, and I think most Americans are entitled to ask, three very basic questions:

Why, when we possess this wealth, do we add to our balance of payments deficits by denying it to ourselves?

Why, when we possess this wealth, do we add to our national security dependence when we could relieve it substantially by actions taken to use our own resources?

Why, when we possess this wealth, would we endanger our environment by having some of it produced overseas where it is not produced with the same concern as it is within the boundaries of our own country, and when the transportation of oil is demonstrably more dangerous than the production of it?

Why, when you listen to the people say that we do not pay enough for energy, do we not say there is a segment of America that can pay no more?

Those who look to the future and complain about an underclass would condemn that underclass to life in that region of the economy forever by simply denying us access to the resources that we have and by trying to change our habits by making the poor and everybody else pay more.

So I salute what you have done, Secretary Watkins, and I salute what the President has done, and I am enthusiastic about the legislation that Senator Johnston and I have introduced. I very much appreciated the President's commitment yesterday to see this thing through to the achievement of a policy and a strategy and the legislation to back it up that America can be on the road to achieving what those graphs that you will shortly show us say we can achieve.

Thank you, Mr. Chairman.

[The prepared statement of Senator Wallop follows:]

Prepared Statement of Hon. Malcolm Wallop, U.S. Senator From Wyoming

Mr. Chairman, I am pleased that the Committee is holding the first of many hearings on U.S. energy policy and the reflective legislation that you and I introduced.

I am also pleased that, yesterday, the President transmitted to the Congress the Administration's proposed national energy strategy which will also be considered by the Committee during these hearings. Secretary Watkins is to be commended for an 18 month effort that has brought us to this point.

One of the most important tasks we could complete in the 102nd Congress is the development and implementation of a comprehensive energy strategy: a set of policies which will boost domestic energy production and improve the efficient use of energy. The strategy before us and the legislation which will follow it frames these issues.

As the Congress moves toward enacting a national energy policy, we will blend many of the Administration's proposals with our own. This will be a joint effort. I wish to emphasize my determination to see a balanced policy enacted in the 102nd Congress.

We must revive the idea of "National Interest". Our interest reflects our desire, our necessity to be involved in the world. Our vitality is dependent on our ability to engage in trade. As a trading nation, we require the unhindered flow of resources to sustain economic viability. No commodity is more essential than energy to a modern society, yet its production is largely taken for granted until we are told we may have to do with less or pay more for it.

It is obvious that America's energy situation is deteriorating. Our dependence on foreign oil has risen from one-third in 1973 to one-half today, and predictions are that by the end of this decade we will be two-thirds foreign dependent.

Not only does our growing dependence on foreign supply jeopardize our energy and national security, it also threatens our economic well being. Recall the economic stagnation, high unemployment rates, double-digit inflation and soaring interest rates that accompanied the oil shortages during the 1970s. Nor should we lose sight of the fact that to the detriment of our economy each and every single day we spend $180 million on imported energy—more than one-half trillion dollars over the past decade.

Now some will say that all we have to do is simply conserve—that we can do more with less.

Well, we already are doing more with less: energy consumption per unit of Gross National Product is down twenty-eight percent since 1973, and the miles-per-gallon of our cars is up by more than fifty-four percent.

But our total energy consumption is still increasing. The reason is obvious: we are a growing Nation. We have more people, our economy is growing and who will deny the need to raise the standard of living for many Americans.

I suppose we could try to turn back the hands of the clock and make do with less. We could stop Americans from purchasing the cars they need, and we could reduce our standard of living. But you know, as well as I, that that is dreadful public policy. Worse still, it is needless. What then, should we do?

First, let us recognize that unless we act now to provide for our future, the energy we need won't be there when we want it. God may take care of fools and idiots, but he won't produce energy.

Second, we must develop an energy policy which takes all reasonable steps to promote domestic energy production—oil, natural gas, hydro, coal, nuclear power, alternative fuels and so on. Our energy problems exist not because we have a shortage of resources, but because we have failed to make those resources available to the American people. Our energy industry has proven capable of producing all forms of energy in an environmentally appropriate manner.

Third, and most importantly, over the long-term we must implement the energy policy we develop. It does no good to once again produce a report that sits on the shelf collecting dust. We cannot afford to simply wait and hope for the problem to be solved. Such a posture invites the Saddam Hussein's of the world to try and control world oil supplies.

As we are all too aware, today in the Persian Gulf there are roughly one-half million U.S. and allied troops defending against Iraqi aggression; aggression which threatens one-third of the world's oil supply and two-thirds of the world's oil reserves.

It is sadly ironic that many of those who oppose our defense of Kuwait and Saudi Arabia are also opposed to taking actions which are essential if we are to reduce our foreign oil dependence—actions which are proposed by the legislation now before us.

As policy makers, we are responsible for the long-term needs of our society. America's long-term economic well-being rests on adequate supplies of reasonably priced energy. Take that away and our economy will falter, leaving us in danger of becoming a second-rate power.

We face a choice. We can act to assure our well being, or we can instead do nothing and consign our future and our treasure to the good will of foreign producers—producers who have already demonstrated that they have their interests, not ours, in mind.

We must also recognize the implications of the so called "Green Wish", the virtually impossible achievement of a benign environment. We know how to domestically produce energy in an environmentally acceptable manner. Instead, extreme environmentalists prefer to rely on foreign energy supplies that are often produced with environmental impacts that would be considered unacceptable in the United States. We are becoming the "dirty" Americans, not at home but by what we demand abroad.

With respect to our omnibus bill and the Administration's proposal, let me say that I do not agree with every provision in either. Moreover, there are many things I think should be included which are not, but both bills are a good place to start the debate. They can serve to begin the legislative process during which we can fine-tune the proposals.

This legislation will be controversial, but anything worthwhile will necessarily be controversial. I hope—and expect—that through this process we will be able to craft a policy that most will be able to support.

Fundamental to the success of any national energy strategy is that it be sufficiently flexible for all domestic energy supply and demand alternatives to compete in the market place. Frankly, the current energy situation provides an opportunity to promote competitive, market-oriented energy policies that rely on the strengths of our energy industry.

I want to welcome Secretary Watkins to the Committee and look forward to hearing his testimony.

The CHAIRMAN. Thank you, Senator Wallop.

For further comments from committee, we will hear from the committee members in the order in which they have arrived. We will begin with the first to arrive. The firstest with the mostest, our newest member, Senator Wellstone.

STATEMENT OF HON. PAUL WELLSTONE, U.S. SENATOR FROM MINNESOTA

Senator WELLSTONE. Thank you, Mr. Chairman.

Admiral Watkins, I appreciate your being here today and I look forward to your remarks. And I will withhold judgment. I want to hear from you.

Let me just express some of my concerns which are a little different from Senator Wallop's.

I know you have spent a good 19 months, as the Senator mentioned, in developing this plan and I appreciate that effort.

I am a little bit disappointed insofar as I do not see the emphasis on energy conservation and clean energy alternatives, an emphasis that I think many Americans were waiting for. I think that people in our country, as my colleague mentioned, do not want to see us so dependent upon Middle Eastern oil. We are all for reducing that dependency.

The question is how we reduce that dependency. And I believe that the evidence is in and that efficient energy use, saved energy, and clean fuels has to be the foundation of a credible national energy policy. In this strategy, I see a tremendous emphasis on oil and coal and nuclear, but I do not see the emphasis on saved energy, efficient energy use, and clean fuels.

I also would like to say that I believe that there is a critical connection, a nexus, between energy, the environment, and economic development. I do not think these are separate paths. I think that we can conceive a policy where we bring together these critical components.

I wait to hear what you have to say, Admiral. But I want to express my concern about global warming. I want to express my concern about our reliance on fossil fuels. I want to express my concern about our dependency on oil. I want to express my concern that we take seriously efficient energy use, saved energy, and clean fuels.

And I want to express my concern that I just do not see the emphasis on that in your report.

The CHAIRMAN. Thank you very much, Senator Wellstone.

Senator Domenici.

STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

Senator DOMENICI. Thank you, Mr. Chairman.

Mr. Secretary, let me start by doing something that we do too little of and compliment you. Over the next few months I am fearful that you are going to hear a lot of the opposite.

I think you will probably start today with the drum beat across the country about how ineffective this policy will be. I am sure that with reference to environmental issues and nuclear issues, you will not receive many plaudits in the next 2 months or 3 months.

But I want to say to you that we ought to think a little bit, just a few minutes, maybe 3 minutes, on how we got here and maybe it will be helpful to some and perhaps a bit to you.

First, let me compliment you again because you have taken the environmental bull by the horns at DOE. And that should stand you in good stead as we start this process. But I am not sure that very many people understand what you have done.

It was started in a minuscule manner by your predecessor, the environmental inventory and the like, but anyone who knows the history of congressional and executive indifference on DOE's environmental policies and neglect can only marvel at what you have done and what your goals and plans are.

I think people should have some confidence in your Department as we approach the energy policy stage because of that.

Secondly, you know all of the attention has been focused on the troops in the Middle East, as well it should, but I think we should compliment you and your Department on the way you have handled SPRO. It is kind of a little-known period of this recent past history. I look at what the economists were saying. They were sitting at their desks, quaking in their boots, the consequences of this event in history up to this point was going to be so terrible. You were training the DOE people and preparing them and you used the SPRO, as I understand it. Some will criticize it. I think you used it appropriately and professionally. I compliment you for that.

I would like to reflect for a few moments now on why I think you, as Secretary of Energy, and those who are trying to put together a strategy will find it extremely difficult to achieve. I am hopeful that we will. And I hope you can provide us with some numbers that will show that my concerns are not well founded. That would really be good news to me.

In 1976 and thereafter we had the luxury of trying to fashion an energy policy with the prospect of ever-escalating oil prices. We could fashion a bad policy in a market place that would bail us out. We saw remarkable conservation over the next decade.

Senator McClure, Senator Johnston, Senator Domenici, and five or six others saw the peril of low oil prices and what they would do and what their effect would be. That is why we created a Synthetics Fuels Corporation. It is gone now, Mr. Chairman, but it was an institution which at least some of us envisioned as carrying us through this inevitable decline in prices and using some of our resources which have been alluded to here by others. They may not favor the synthetic fuels approach, but nonetheless, I reflect on it.

That decline came in oil prices. The institution failed to survive, that is, Synthetic Fuels, as a cornerstone of this policy. And conservation slowed as well. Now we are faced with the problem of implementing a new strategy when we are faced with lower oil prices than we were and the prospect that they will decline or stay flat.

A much unknown fact and one that no one wants to talk about is that as oil prices decline, and they are apt to again dramatically, our dependence on foreign oil grows and our ability to substitute diminishes and our conservation diminishes.

So it seems to me you hope to encourage production and conservation in full view of that. And I say to you that it will not be easy. I know that you hope that the lower cost of technology for enhanced oil production will dramatically impact on the positive side. It might. I know your research is aimed at lowering these costs. This is one of America's unknown resources, the secondary oil is there in abundance, already found. We just do not get it up through the wells. We need to do that. It is there in abundance.

I hope you can tell us that all of this increased production and conservation that you predict will take place in spite of low oil prices. And I think that is really the issue. We passed the enhanced oil recovery tax, you were part of helping us with that, significant credits to try to go get that.

You have proposed extending the investment tax credit for renewables. That will help. Similarly, if we need to look at tax relief as an incentive for conservation. While this committee does not have jurisdiction, I think we ought to put it on the table and see how much it costs and see if it will work.

Lastly, let me compliment you on your recognition that natural gas as a clean and domestically plentiful—and let me stress the word plentiful—fuel, which can help relieve this oil dependence is part of your strategy. I think we should maximize that wherever we can.

I just want to reflect on the efficacy of projections. 1976, some of us were here, we were being told by predecessor Department of Energies and their estimators that we were out of natural gas. And as a matter of fact, one major estimator said we would be out today. We would be sitting at this hearing wondering where all the natural gas went.

Well, I hope the example of inept predictions keeps us from taking immovable positions in the debate that will follow.

Mr. Secretary, I think we can do this. I know you spent a great deal of time and you have stressed the science and technology aspects of it along with others. And we will all be working together to see if we can put something together for our country.

Thank you very much.

The CHAIRMAN. Thank you, Senator Domenici.

I want to call on Senator Wirth. And I want to thank him in advance for the work he has done on conservation. Much of what we have put in this bill on conservation is as a result of his work. And I think he will have additional initiatives which will help further strengthen our bill on conservation.

Senator Wirth.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM COLORADO

Senator WIRTH. Mr. Chairman, thank you very much. I greatly appreciate the speed and the commitment with which you and Senator Wallop have addressed this issue in the committee.

I think it is very clear that behind all of this debate is the obligation we have to 550,000 young Americans in the Persian Gulf. It is clear that we are in the Persian Gulf for two reasons. One is a concern about Saddam Hussein's weaponry. And the other is a concern about oil. We have the obligation to take on that second one right here.

I think you are moving out very smartly on that.

Admiral Watkins, I would thank you very much for your continued commitment to a long-term energy policy. You have been working on this for 15 months with Henson and Linda. And you laid out, I think, a very admirable menu for us back in April. I wish more of that had stuck when it got to the White House.

But I think it is our obligation to pick the best things there. Let us hope that much of what they were doing may have been technical or strategic maneuvering on their part, and that they will end up supporting a policy that looks more like many of the recommendations in your initial findings from your hearings across the country.

People here, Mr. Chairman, this morning, have noted their own concerns and interests. And let me be just be very brief about mine.

I thank you for your kind comments on our conservation initiatives of last year. Linda helped us frame those and to better understand the Department's concerns on those issues.

I think the centerpiece of any reasonable energy policy in 1991 has to start with a major commitment to conservation. I was pleased to see that your legislation, Mr. Chairman, does that. And I will be looking forward to offering some more pieces on that front.

The alternative uses of natural gas that Senator Domenici spoke of are something which many of us in the Rocky Mountain region are very concerned about. We want to do what we can to remove the regulatory barriers that stand in the way of bringing that very plentiful, domestic fuel to market. Some of those initiatives are in the proposed National Energy Strategy. I and others will be offering additions to this very important set of initiatives.

I appreciate your continued support for solar, Admiral, and the administration's budget commitment to the Solar Energy Research Institute, obviously, of direct concern to the State of Colorado.

I think all of those things can be done with relatively little controversy. I think we can put together a package on conservation and alternatives that most people are going to agree with.

I would hope that as we move on to the more controversial nuclear area that we all realize that there are four central issues out there: the waste issue, the cost-effectiveness issue, the safety issue, and the nuclear nonproliferation issue. Those four sit out there.

And I would hope that we end up with a package that is going to address all four of those, and provide an aggressive research program to see if we can handle those four issues and come to understand whether nuclear is going to have a major role in the 21st century.

The world has changed. And I think those who made commitments earlier related to nuclear, based upon their deep and real concerns from Three Mile Island and Chernobyl, have legitimate fears.

But we also have a legitimate new world out there with the global warming phenomenon, which is very well documented. And we are going to have to think smarter and clearly and cooperatively on that effort.

Finally, Mr. Chairman, as you and I have talked, we are going to have a major skirmish, I hope not a battle, but certainly lines will get drawn over drilling in the Outer Continental Shelf off of the Gulf Coast, off of the Atlantic Coast, off of California, and in the Arctic National Wildlife Refuge.

There are those of us who share a set of values, and it is no surprise, related to our globe and the environment and what many are calling, in I think a very appropriate fashion, the preservation of God's creation. And I think we have an obligation to think through and understand where people are coming from on that and whether there are going to be some very legitimate different views.

There are also some very legitimately different views on the long-range perspective for what the country ought to do. We cannot produce our way out of this and we are going to have to think our way out of it. We are going to have to start as I said before, with an aggressive conservation program.

As a final note, Mr. Chairman, it is clear that price is not going to be the determinant anymore. Would that it were, and we were dealing with higher prices, as you suggested, as Senator Wallop did, and as Senator Domenici did, but that is not in the cards today.

I appreciate Senator Domenici's listing and recognition of the incentives that were involved there. And I would support all of those. I wish we did have a higher price regime. But I do not think we do.

Rather, energy policy is going to be driven now by our concerns about our national security and by our concerns about the environment. This is a new world. And packaging all of this together is the challenge that faces us.

I look forward to working with you, Mr. Secretary, and your very able staff. And again, thank you very much for the very commendable and thorough job that you, as usual, have done.

Thank you, Mr. Chairman.

The **Chairman**. Thank you.

Senator Burns.

STATEMENT OF HON. CONRAD BURNS, U.S. SENATOR FROM MONTANA

Senator **Burns**. Thank you, Mr. Chairman.

And although we just got this yesterday, we did have some sort of an idea of what was going to be in your report.

I applaud you and Secretary Moore in the charge that you were given in trying to write a report or set a strategy for energy security in the real world. I think we have to take the world as it is rather than as we think it is or as we would like to make it.

There are several points in this that I think you have taken a strong and bold step in the right direction. There will be some bills that will come before this committee that will try to attain the end that I think you are trying to attain here. And with the melting of everybody's ideas, I think we can establish some kind of a strategy that will take us well into the middle of the next century.

There is going to be new technologies that will come along and those strategies will have to be able to adjust. I think you have lessened flexibility in here and some options for the American people. If you go in one direction and, this has got to happen, if you want to opt for another direction then certain other impacts are felt in other areas.

First of all, I was delighted to see that you mentioned fuel cells. I happen to believe that that is going to be one of the areas of technology that will be very, very important to us going into the next century. It is important, not only from a standpoint that we have the resources to supply those fuel cells, but also its impact on the environment and this type of thing.

There are some troubling things in this report, but nonetheless they are at a minimum. And they are things that I think we can address.

If there was one sin that was committed in the 1980's, it was that we completely, through probably no fault of our own and maybe we did not realize how fragile it was, but we completely destroyed the infrastructure to search for and drill and lift petroleum. We completely destroyed it. And now they are having a hard time amassing venture capital to go into high risk areas so that we can get our dependency away from foreign sources.

I think the thrust of our development should be in this hemisphere, South America. And under this type of thing we have to make some kind of a thrust because we still live in a world that depends on oil. That is the real world.

I am in complete agreement with your policy that you are taking with natural gas, your policy changes with NEPA, and the siting of gas pipelines and distribution systems here in this country. Natural gas will play even more. It is a clean, very clean fuel. Environmentally it is the right thing to do. And we have a lot of it.

I think that maybe some of the policy changes you have recommended for the siting of pipelines and distribution systems should also be extended to the expiration of natural gas in this country.

And in coal, if there is one thing we have, gentlemen, in this country is coal. And clean coal technology has to move forward. The ability that we can bring that fuel on line in an environmentally sound manner, we can do that. We know that we are on the cutting edge of that technology.

The raw export of coal, I have some problems with because I am a man that likes to take a natural resource and add value to it before we export it for additional commercial activity and jobs for our people here in this country.

The development of new energy crops, agriculture, we are setting aside agricultural lands over in the Agriculture Department for our Food Security Act and to keep our farmers on the land. The technology of new crops to produce alcohol and biomass and this type of thing.

I applaud you for that because I think the thrust has to be there. That is a renewable resource, one that comes every year with the rains and the warm weather of spring.

Also, another area in which I am very aware, is telecommuting. Probably little seen in this thing was a little blurb that you put in there that more people will be staying home and doing business with computers.

And if there is something that was happening over in the Commerce Committee, it is changing the policy so that we can get fiber optics to every corner of this Nation so that people can do that, plug into supercomputers and this type of thing. Telecommuting will be very, very important.

All in all, I applaud you, and I would like to associate my remarks with Senator Domenici. I think you will be taking a lot of barbs from here on out because of the thrust. But nonetheless it is a bold and brave step that you have taken. I applaud you for it.

And I will be looking forward to working with you and the Chairman on that policy and those policy changes.

Thank you, Mr. Chairman.

The **Chairman**. Thank you, Senator Burns.

Senator Craig.

Senator **Craig**. Mr. Chairman, for the sake of my colleague from Oklahoma's schedule, I will yield to him and appreciate recognition following that or in sequence following that.

The **Chairman**. Senator Nickles.

STATEMENT OF HON. DON NICKLES, U.S. SENATOR FROM OKLAHOMA

Senator **Nickles**. Mr. Chairman, thank you very much. I apologize. I am supposed to be doing a special order this morning at 10:15 a.m. I will do that and then return, because I look forward to this hearing, and I think it is an important hearing. It is one that some of us have been working on and towards for a long time, maybe a little disgruntled.

I remember when Secretary Henson Moore was in Oklahoma, and I said why are we going to take over a year to do something most of us already know what needs to be done and should be done? It finally is together, and I hope that Congress will act expeditiously on it. I wish to compliment the Secretary and those who have accumulated this report. I think they have done some good work.

Now I have heard a lot of criticism on this already. I have heard it last night, I have heard and read it this morning, and I have heard some of our colleagues say, well, we have had no energy policy for 10 years. I guess if you said, well, you did not have an energy policy during the Reagan-Bush years, that meant we had an energy policy during President Carter's years.

I would just inform my colleagues who take that position, we spent the better part of the last 10 years trying to undo a lot of the damage that was done and a lot of the mistakes that were done during the Carter administration. The Carter administration passed a windfall profits tax. That was part of their big platform for financing some of their projects. We repealed it. It took us way too long to repeal it. It raised about $78 billion from the domestic industry, a few States, only on domestic production, not on imports.

So we encouraged imports and discouraged domestic production. We finally repealed it, but that was a cornerstone of the so-called former energy policy of the previous decade.

We repealed the Synthetic Fuels Corporation. I am glad we did. I did not think the Federal Government should be involved in billions of dollars of massive subsidies, trying to get that directly involved in the marketplace. Congress finally agreed to repeal it. It took us years to do it and billions of dollars to do it.

The Carter administration also said we should not be burning natural gas. Senator Johnston and others joined me in an effort, and we finally did repeal the Fuel Use Act. That was a policy that said we are running out of natural gas so you cannot burn it in industrial plants and utilities. We finally repealed it, but it took us too many years to do it. Again, we were undoing some of the mistakes that were made during that previous decade of energy policy.

So again, my comment is I want to have a good energy policy, not a bad energy policy.

We also repealed the Emergency Allocations Act where the Government was setting aside so much oil. It took us a while to do it. Actually, President Reagan had to veto the bill for reauthorization. We sustained the veto. I think that was a good bill to veto. It did not need to be reauthorized, in my opinion; again, another big Federal Government intrusion.

Then in the Natural Gas Policy Act of 1978, we in effect for the most part deregulated natural gas, and, again, most of the Members of this committee joined us in that effort to make that happen, but it was really changing a mistake that was made back in 1978 where the Federal Government still thought we should have all these different price controls and regulations.

So we had an energy policy in the late 1970's, but it was a bad policy. Congress, if you think Congress collectively, finally repudiated and refuted those negative energy policies that were created in a time of crisis, in my opinion a time when Members of Congress and the administration were misguided, misdirected and mistaken.

So I think it is important as we work on energy strategy for the 1990's and for the next millennium that we use good sense, common sense, a balanced approach. For the most part, I think that the administration's proposal did that.

For my colleagues that have said that this is tilted toward the production side and not enough on the conservation side, I would disagree. I will tell you that from the producing state I see not much in here to really enhance production in the State of Oklahoma or Texas. I wish I saw more. I see nothing on the tax side. Some of us really think we need to do that. Some people say, well, we did that last year. That is not really the case.

Frankly, the changes that were made last year almost netted out to be nothing. If you look at alternative minimum tax, we place intangible drilling costs, which is an out-of-pocket, nonrecoverable business expense, as a preference item for alternative minimum tax. Alternative minimum tax should be taxing items that are not taxable, tax-exempt items, to make sure everybody pays their fair share, not putting a tax surcharge on an out-of-pocket business expense. It makes no sense.

Not only that, but we increased the tax. So that discourages domestic production. When you have an out-of-pocket, nonrecoverable business expense and then you put a tax surcharge of 24 percent on it, you are going to have a lot less drilling.

So I do not think we really did enough on the domestic side. I would hope that we would do more. I will work to see that we do more both in this committee and also with other Members on the Finance Committee to try to come up with a policy that would really enhance domestic production. I am talking about domestic production including ANWR, including OCS, and including the Lower 48.

Again, I compliment the administration for finally getting this policy together. I hope that we can strengthen it. I hope that we do not follow the mistakes that were made in the 1970's and go too overboard in mandatory CAFE standards and others that would really cripple certain industries and punish consumers for their choices.

Mr. Chairman, thank you very much.

Thank you, Senator Craig.

The CHAIRMAN. Thank you, Senator Nickles.

Senator Fowler.

STATEMENT OF HON. WYCHE FOWLER, JR., U.S. SENATOR FROM GEORGIA

Senator FOWLER. Mr. Chairman, I will be uncharacteristically brief in the interest of us all.

First of all, I want to thank you and the other Members of the committee. I have just returned to this committee after a 2-year hiatus and wanted to come to be a part of the development of this strategy, which many of us have advocated, Admiral Watkins, for a long, long time.

I do commend you and my former colleague on the Ways and Means Committee, Henson Moore, and your people for really being the first since President Carter left office to point us in the way of a comprehensive strategy. That is no small undertaking either by determination or by fact. I look forward to working with you.

Mr. Chairman, I thank you very much, and Senator McClure, who is no longer with us. Even though I have been gone, my interest in energy policy has not flagged. Thanks to this committee, and its members, we passed a renewable energy and conservation bill through this committee. It was small, but it took 8 years to do it, and the President signed it into law in 1989, which could not have been done without the leadership of the Chairman and so many Members of this committee.

I am glad to be back with you. I will try to be more of a help than a hindrance.

[The prepared statement of Senator Fowler follows:]

PREPARED STATEMENT OF HON. WYCHE FOWLER, JR., U.S. SENATOR FROM GEORGIA

First let me say how pleased I am to return to the Committee on Energy and Natural Resources. I had to take a hiatus for other committee assignments. But even while I was off of this committee I did my best to stay focused on energy issues, and was pleased to win passage of a renewable energy and conservation bill in 1990. I certainly want to thank the members of this committee, particularly Chairman Johnston and Senator McClure, who helped in that effort and, again, I am glad to rejoin your ranks.

I also want to commend the efforts of Admiral Watkins and his people at the Department of Energy. Many of us have been arguing for years—and it could not be more evident now—that we need a comprehensive long term energy policy. And, while I am not sure we would draw the same conclusions, I am glad to see an administration, for the first time since Jimmy Carter left the White House, working in that direction and placing some emphasis on that goal.

We don't just need energy to keep the lights on late at night to watch David Letterman. We don't just need it to drive to Disney World over summer vacation. We tend to think of meeting energy demand in terms of lifestyle.

We cannot forget that we are also talking about the means of powering our economy. Our entire future depends on energy. If we cannot provide it, we cannot sustain many of the accomplishments we are so proud of in this country. Much less will we sharpen our competitive advantage for a later day. We have not made the necessary investments in a more efficient society, or in a secure energy supply.

It is not likely to become more secure, regardless of what happens to Saddam Hussein. In 1967, Iraq was joined by Kuwait in cutting off oil exports to the United States—because of our support for Israel in the Six Day War. In 1973, the Arab states imposed a more comprehensive embargo following the Yom Kippur War. In 1979, our former allies in Iran led a cut-off of U.S. oil supplies after the downfall of the Shah. A few years later we give our support to Iraq against the radical Iranians. True to the pattern of total unpredictability, in 1990, Saddam lashes out against his fellow Arabs to threaten the supply of oil, not just to the United States, but to the world.

And what progress have we made, in these turbulent decades, where our oil dependency is concerned. Our 50 percent dependence on imported oil is greater than it was at the time of the original embargoes. Oil imports make up over half of our trade deficits. The conservation and alternative energy programs established to improve our energy security in the 1970s were dismantled in the 1980s.

We must have a better answer for the 1990s. This report, from what we have heard beforehand, seems to concentrate on increasing U.S. oil production. There is some logic to that, but I don't believe the logic carries far enough to qualify as a long term strategy.

The United States is never going to produce more than two or three percent of the world's oil under any circumstances. The vast majority of world oil reserves will remain in the Middle East, and that predominance will increase as the years go by. In fact, the faster we consume our own oil, the faster that will happen.

The answer we need to be looking for, it seems to me, is how to get away from oil as such an essential energy source. The fastest, easiest and cheapest way to do that is through conservation. That is why I am disappointed to see that energy conservation and energy efficiency are not a higher priority in Admiral Watkins recommendations.

A second promising avenue is renewable energy. Solar, photovoltaics, geothermal, wind and biomass are not ready to take over power generation in America tomorrow. But we have made substantial progress. We could bring more of these technologies to market if we were making the effort that other countries are making in renewable energy. Unfortunately it is more typical to see American ingenuity develop a technology like photovoltaics only to see the market taken over by the Japanese.

I think it is very realistic to say that, if we tried, we could generate a quarter of our power through renewable technologies by the end of the decade. There would be many benefits to that in addition to reducing our dependence on imported oil.

We would save our environment from the ecological costs of burning, mining and drilling for fossil fuels. In fact, Senator Hatfield and I added a renewables amendment to last year's clean air bill.

We could turn our imported oil trade deficits into a renewables technology export trade surplus. Many of these technologies are ideally suited for remoter regions that are not already connected to a power grid. In fact, an investment in renewables would be much more practical in many ways in countries that do not already possess a highly developed and specialized energy infrastructure.

This can have worldwide implications, not just for trade and for energy security, but for the environment. The developing world is now destroying its forests and running up huge debts at an alarming rate for power generation projects. Clearly, we need a world energy alternative.

The third point I'd like to make, that any true long-term strategy must take into account, is that we must commit ourselves to developing alternative fuels—and means—for transportation. We have reduced the amount of oil needed for power generation in this country. One of our greatest areas of energy consumption—and the one in which we are still almost entirely oil-dependent—is transportation.

I have long believed that we give short shrift to mass transit. I'd like to see more in the way of urban commuter rail systems, such as MARTA in Atlanta. I'd also like to see an expansion of AMTRAK service. We hear a lot of complaints about the cost of subsidies for rail travel. But they are minute compared to the billions of dollars in subsidies we pour, every year, into fuel combustion travel.

Just look at the President's latest proposal to invest more hundreds of billions into the interstate highway system. We need a highway system and we make a strong investment in it. We need mass transit systems--yet when it's time to pay for them, that investment is denigrated as a "subsidy."

I recognize, as I am sure Admiral Watkins and all of my Senate colleagues do, that we have to be realistic. America's love affair with the automobile is not going to end overnight. But we do need to work towards more fuel efficient cars and trucks. That means we need better incentives for citizens, as well as industry, to move in that direction.

You may have seen the 1967 four-mile-to-the-gallon Batmobile I've got parked outside. My tax bill, to drive around in that gas guzzler, is hundreds of dollars less than that of a family that goes out and invests in a modern, fuel-efficient model. That is a backwards policy from an energy standpoint.

We can also do more to develop fuels that Middle East dictators cannot control. We can make fuel out of corn and I've got some farmers down in Georgia that would be happy to sell it. It seems to me that the only alternative fuel that gets much attention in this report is nuclear power. I'd just have to say that, even when we get beyond the safety and disposal problems, I do not look for the day when I replace my old Buick with a new nuclear-powered model.

Still, I am glad that we are all gathered here today working towards the same ultimate goal of energy security based on a long-term, comprehensive plan. I will look forward to working with Admiral Watkins and the administration, and with my colleagues, once again, on this committee.

The **CHAIRMAN**. Thank you very much, Senator Fowler.

Senator Conrad.

STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

Senator **CONRAD**. Thank you, Mr. Chairman. I, too, will be brief because I am very interested in having a chance to hear from Admiral Watkins. I want to commend the Secretary and his staff, because he has put together an outstanding staff, and I think this is a good first cut at a comprehensive strategy.

Admiral Watkins, you have done a superb job in putting together an overall strategy. I wish more of it had been preserved in the bureaucratic conflict that always ensues when one comes forward with an initiative. I think what you put on the plate initially was excellent.

There are two areas where I think we can do better. Again, that is acknowledging that much of what was done in those areas did not survive the internal warfare. The two areas to which I would refer that are of concern to me are, first, conservation. If we are going to have a comprehensive policy that can sell, we have to do more on the conservation side.

I know you had many more initiatives included in your original proposal. I applaud you for that, and hopefully we can strengthen this overall plan on the conservation side before we are done.

The second area would be our coal resources. As I look at this overall plan, there are many parts of it that are very strong, and there are some parts that need strengthening. One of those is coal. We cannot cut back on clean coal technology in the midst of trying to put together a comprehensive plan. There are other areas in which I think we need to address the coal resource as well. Senator Burns of Montana addressed some of them. Hopefully we can work together in the days ahead to strengthen that area.

Mr. Chairman, I want to thank you and the Ranking Member, because I think for the first time in a very long time we actually have the opportunity to do something significant and important for our country with respect to energy policy. You have taken a leadership role. You have fashioned a comprehensive proposal that is very close to something that I could support and enthusiastically endorse. I look forward to working with you and Senator Wallop.

I do think this is an historic time for our country, a terribly important one, and I want to again thank the Secretary and his staff for an excellent start on their side.

[The prepared statement of Senator Conrad follows:]

PREPARED STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

Mr. Chairman, today we are gathered in this room to listen to Admiral Watkins discuss the Administration's National Energy Strategy proposals. While many will—and already have—voice their complaints about the specifics of these proposals, I think it is important to keep in mind that the efforts made by Secretary Watkins, with a little help from the Middle East crisis, have added momentous weight to efforts to adopt a comprehensive national energy strategy. The fact that we may be within reach of actually signing energy proposals into law is historic. We have had absolutely no energy strategy for over a decade.

I have long felt that one of the most critical challenges this nation faces is the adoption of a sensible, comprehensive energy strategy. We must wean ourselves of our dependence on foreign oil; we must use the resources we have in this country in a clean and efficient way; and we must change our habits to conserve our energy resources. A policy cannot be weighted in any one direction—it cannot simply be focused on supply side or demand side. If we are to enter the next Century prepared to deal with the challenges ahead, we must act now to chart the course for the future. We will not be able to deal with future energy crisis as they come. We must invest now to develop technologies and energy sources.

I want to commend you Secretary Watkins for the yoeman's work you have put into this document. I know you started 18 months ago—long before there were fears about a ground war in the Persian Gulf—and you conducted an open process with hearings in nearly every state. I know you waded your way through the minefields of the Administration's bureaucracy, and came out with a slightly altered proposal. Nonetheless, this document puts the weight of the Administration in favor of a national energy strategy.

I have a number of concerns about the proposals embodied in the strategy. I oppose the sole emphasis on production proposals. The strategy will allow exploration of the Coastal Plain of ANWR and in the OCS and deregulate the natural gas industry, which will almost certainly increase production. Yet there are very few specific and workable proposals to reduce consumer demand for energy resources.

This strategy ignores the transportation sector's near total reliance on oil. It proposes to "study" the Corporate Average Fuel Economy question. There is absolutely no commitment to act on this issue. This leaves the strategy lacking a key component of any comprehensive national energy strategy.

I believe that the research, development and demonstration proposals fall far short of the investment this country needs. The NES discusses the need for development of alternative fuels, but simply does not follow-up on that commitment. The Clean Coal Technology Program, for instance, is on the chopping block. The Administration budget proposes to eliminate this program, just when promising technologies are being demonstrated as a result of the CCT program.

One final concern is the proposed reforms in the Power Marketing Administrations. These "reforms" constitute a break in the compact made between investors in public power and the federal government. In my part of the country, rates for rural people and municipalities could go up as much as 21% as a result of these "reforms."

Thank you, Mr. Chairman, for holding this hearing. Your leadership and the leadership of Senator Wallop has been absolutely essential to this debate about our future energy needs. I look forward to working with you, Admiral Watkins, as this debate moves forward.

The **CHAIRMAN**. Thank you very much, Senator Conrad.

Senator Seymour. Senator Seymour was here.

Senator Akaka.

STATEMENT OF HON. DANIEL K. AKAKA, U.S. SENATOR FROM HAWAII

Senator **AKAKA**. Thank you very much, Mr. Chairman.

Mr. Secretary, I, too, want to applaud you for your work over the years. You served us in Hawaii, and I consider your work in the field of energy as being a benefit to all of us.

Yesterday, the administration unveiled its long-promised national energy strategy. Unfortunately, the energy plan falls short of what this country needs, and deserves to achieve true energy security.

It appears as though the administration has missed events over the past 20 years which shape the energy problems we face today. There is no other way to explain an energy policy that continues to promote energy consumption at the expense of conservation.

As has been pointed out in analysis after analysis, the problem with our country is that we are addicted to cheap oil. Unfortunately, our addiction is linked to the supplies from the very dangerous neighborhood of the Middle East. Our servicemen and women are now preparing for a ground offensive against Iraq. They are about to find out just how dangerous the Middle East can get.

The administration's energy plan barely scratches the surface in two vital areas, conservation and renewable energy. Although often overlooked, energy conservation is America's greatest untapped source of energy. We have not come close to exhausting the full potential for savings through conservation. I am pleased that the administration is beginning to look at the potential of renewable energy. The Federal Government's commitment to renewable energy research and development reached its peak in 1980. Since then there has been an 80 percent cut.

We look forward to some improvement in gaining lost ground. We face a pressing need to develop a truly comprehensive energy strategy based upon increased energy and dependence and decreased reliance on exhaustible energy sources that threaten our environment.

Mr. Secretary, I look forward to working with you and your staff and also with Chairman Johnston and Senator Wallop and my colleagues on the Energy Committee to develop an energy legislation that services the interest of our Nation.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Akaka.

Senator Craig.

STATEMENT OF HON. LARRY E. CRAIG, U.S. SENATOR FROM IDAHO

Senator CRAIG. Thank you, Mr. Chairman.

Let me at the outset congratulate both you and our ranking minority Member, Senator Wallop, for your introduction of strategy and legislation and to you, Admiral, and to your Department.

I felt very proud and very privileged yesterday to be with you at the time of introduction of this, what I believe to be, a comprehensive effort. I find it oftentimes interesting that we, as a society, tend to lose focus. Many have found it to their rhetorical advantage to talk about our presence in the Persian Gulf being that of a oil presence or a need for oil. I would like to rephrase that a little bit. I think we are there because of the power that an abundance of energy in a given area can bring, and therefore, the misuse of that power. This Nation has been a wealthy Nation historically because we have had an abundance of energy. Any policy that denies us an existent abundance of energy, denies us the wealth of this Nation, without question.

I also find it very interesting that we, as a country and a Government today, although some of us may disagree with the presence of our men and women in the Gulf, we are all extremely proud of their performance.

We are proud of that in large part because of a phenomenal use, a successful use of science and technology in the decade of the 1980's because this Congress and this country decided that we would bar no holds toward the implementation or the use of science and technology in the extension of power.

And as a result, today we can all be extremely proud of that performance.

What I see in your national energy strategy, Admiral, is a willingness to extend the same kind of science and technology into the field of energy. And I congratulate you for that.

If we are as dedicated during the decade of the 1990's in that extension as we were in the decade of the 1980's in its extension in the area of defense, then I suggest in 2000 and beyond, we will once again be a very productive Nation in the field of energy. Productive in the sense of all forms of it, but more importantly, productive in the sense of an environmentally sound policy if this country will simply allow us to use our science and technology in those fields.

And the reason I focus on that today is because I noticed within your strategy a certain amount of tech transfer that is extremely valuable and a dedication to education that is also extremely valuable if we are going to use our tools that can be readily available to us in the development of new strategy and the increasing development of an energy abundance in this country.

And for that, I congratulate you.

One of the things that is going to be critically important, my colleague from Colorado alluded to it, because I am one of those that is not at all fearful of the nuclear energy base of this country and its ability to expand and grow, recognizing that we have to deal with waste, we have to deal with safety and that those will drive the cost factor down, not up, if we deal with them wisely. And that is a part of that strategy.

I would hope that this committee, in cooperation with you and the gentlemen to your flanks would be able to then craft both a strategy coming from yours and a strategy coming from this committee and others here on the Hill and to a combined effort that, within a few years, will have, in fact, began a process of directing our science and our technology and the tremendously available talent in this country in production of a policy that we can all be proud of come year 2000.

Ultimately we will be as successful in as we now experience the successes that are there for us to be proud of in the Gulf today because in 1980 this Nation decided to do something different for a change and invest.

Thank you very much, Mr. Chairman.

Mr. Secretary, I appreciate your presence this morning and the effort that you put forth to date on this important issue.

The CHAIRMAN. Thank you very much, Senator Craig.

Senator Bradley.

STATEMENT OF HON. BILL BRADLEY, U.S. SENATOR FROM NEW JERSEY

Senator BRADLEY. Thank you very much, Mr. Chairman.

Mr. Secretary, I welcome you to the committee. And I hope that sooner or later you will be able to give your testimony.

[Laughter.]

Senator BRADLEY. I look forward to that testimony. But before, let me just offer a few comments as I look at the plan that we have been given in this very attractive, bright red booklet.

Let me say that as I look at the proposal—maybe this is not the plan. This is not the plan. I have received the summary of the plan. I am sorry. It is a black book, anyway.

As I read the plan, the accounts of the plan, it seems to me that what you are saying is the objective is essentially to create an oil glut, that we have to increase production. We are going to do that through a variety of ways. And that that is going to be a major help.

Yet it seems to me that the problem is dependence on oil and market volatility. If you create a glut, if the 1980's have told us anything it is that demand is going to increase. Then pretty soon you are going to be back at the problem that you had before. And you have to address dependence on oil and not simply creating more oil, lower prices, more demand, and then putting yourself in the potential, once again, for a crisis to create dramatic increases in price.

So on one level I look at this and I say well, it is a dependence question and I have real doubts that the plan as you have proposed it will increase production by the amount that the plan has expected it to increase production. And I have real doubts that that decrease in consumption, which is a part of the plan will actually take place.

As you know, once, if you do not reduce your dependence on oil, you are then in a circumstance where outside events can create great market volatility. We saw that last summer.

You have a tool to deal with market volatility, that is the reserves, the strategic petroleum reserves. And I personally believe that you have demonstrated that by using the strategic petroleum reserve against possible panic, at the beginning of the actual war, prices dropped from $30 to $22 almost overnight. After you described it, you said you were going to use the strategic petroleum reserve and did begin to use it.

But my argument has been now for almost 8 years that if you are going to use it, and this demonstrates that if you do use it you will have a downward impact on price, that you should also be able to use it whenever there is demonstrated panic, such as last August. And the failure to use the reserve last August as opposed to a couple of weeks ago cost the American consumers $300 million a day.

It is my hope that when you talk about market volatility that you will recognize that the value of the reserve is in dealing with panic whenever it is manifest, not simply in a war situation.

I would hope that as we look at this, we will be able to talk about, in your presentation, the questions on the plan's ability to reduce consumption and increase production.

The CHAIRMAN. Thank you very much, Senator Bradley.

Senator Hatfield.

STATEMENT OF HON. MARK O. HATFIELD, U.S. SENATOR FROM OREGON

Senator HATFIELD. Thank you, Mr. Chairman.

Welcome, Admiral Watkins and your staff.

Admiral Watkins, even before the tragic events in which we now find ourselves in the Middle East, I, like many people, had sensed our enormous dependency upon imported energy through the process of oil development and exploration.

And at the risk of sounding trite, I feel very strongly that within this last decade we have failed to recognize that a national energy policy is really a national security policy to meet our true national security by recognizing the relationship of energy to security.

I believe we are there in the Middle East today because of oil, regardless of what other people say.

And I cannot help but recall that it was within this decade that we had a president of the United States recommend the abolition of the Department of Energy for he saw no relationship between the national strategy of security and energy and felt that the national Government did not have a role in that.

I also recall that it has been in the last decade that we have practically abandoned conservation and that we have greatly reduced our research in the areas of renewable energies in order to be less dependent.

Admiral Watkins, you mentioned about a year ago an energy policy and you have made speeches, you have made many public comments beyond our own personal conversations. I know that to you conservation is a very significant part of an energy policy.

But I also feel that in this report I have a great disappointment because I do not see the focus that I had hoped would be on conservation.

And I also feel that we have not seen the opportunities open to us in accelerating and renewing our commitment to research in the areas of renewable energy. It seems to me we are merely transferring our dependency on foreign oil to increasing domestic oil production. And I do not see that that really focuses on the national security of this Nation.

You have eliminated a lot of cobwebs down there in that Department. You have given this Department new life. And I am concerned that we pursue a policy together, both the administration's proposal and what this committee has introduced as a draft of a national energy policy. I believe that together we can work it out.

In the areas of question, I am going to go back to some of the original concepts that I know existed in the preparation of this report at the Department level. And in no way am I going to try to embarrass anyone in this process. But I want to see the delineation between what the White House has said should be a national energy policy and what Admiral Watkins and the Department of Energy felt should be a national energy policy.

That is like in the appropriations process. We always ask the question, what did you request of OMB, not what did OMB sanitize and filter out as, quote, "the administration's position." It is a very legitimate procedure. I am not faulting the procedure.

But we have to get to the real bedrock on this whole matter if we are going to have an effective national energy policy.

So I welcome this opportunity to hear from you, as I always do. I have enormous respect for you and your Department. At the same time, we have something that transcends procedure and protocol and niceties of politics. We have to develop, I think, a national security policy and a comprehensive energy policy.

I welcome you.

[The prepared statement of Senator Hatfield follows:]

PREPARED STATEMENT OF HON. MARK O. HATFIELD, U.S. SENATOR FROM OREGON

Thank you Mr. Chairman.

Like everyone on this committee, I have been looking forward to the unveiling of the National Energy Strategy for quite some time. Well before the tragic events in the Middle East underscored the very real dangers of our enormous and still growing dependence on imported oil, that dependence had become the source of great concern for me and for many of my colleagues.

At the risk of sounding trite, this nation's energy policies have been running on empty for quite some time now. "Don't do today what you can put off until tomorrow." For the past decade, that has been the motto of our national energy policies. It is no secret to anyone on this committee that federal investment into the research and development of renewable energy has declined dramatically, and serious conservation efforts are practically nonexistent. As a nation, we have consumed and consumed and consumed—and thought virtually nothing of the alternatives or the consequences.

So when Admiral Watkins began talking about the development of a national energy policy well over a year ago, I had high hopes that we would begin to think seriously about those alternatives—and about the consequences of ignoring them. I had high hopes that we could all work together to develop a strategy that makes sense for this country and for the future.

I think Admiral Watkins will agree that a national energy strategy is really a national security strategy. In my view, an energy strategy that begins to move this nation away from its dependence on oil—not just imported oil, but all oil—would strengthen our national security by reducing the prospect of future wars over this resource and providing for a more stable economy.

Simply trying to decrease our reliance on imported oil by increasing our reliance on domestic production while all but ignoring renewable energy and conservation, however, does something very different. As I see it, this strategy actually undermines our national security by virtually guaranteeing that we will be forced into fierce international competition—and inevitably military confrontation—when our own oil supplies run dry.

I know we are talking about this nation's energy policies, but I am convinced that we are also talking about an ethical choice between instant gratification on one hand, and stewardship on the other. We can live for today—or we can build for tomorrow. The choice, at least as I see it, is really quite clear.

Admiral, let me be very frank. I have enormous admiration for you personally—and for the innovative leadership you have brought to the Department of Energy. You have cleared out a lot of cobwebs down there, and opened up a lot of windows. But this document you have presented to us is not only disappointing. Its outrageous. What I do not understand is how this could have happened.

[Attachment.]

HATFIELD SAYS NATIONAL STRATEGY LACKS EMPHASIS ON CONSERVATION AND RENEWABLE ENERGY

February 20, 1991

Senator Mark Hatfield, the ranking Republican on the Senate Appropriations Committee, issued the following statement today following the release of the Bush's Administration's National Energy Strategy:

"The National Energy Strategy released today lacks the fundamental emphasis on conservation and renewable energy that is vital to our national security interests. While the proposal does give passing and admirable mention to these items, I am concerned that the administration has not translated the strategy into substantive programs which will encourage the implementation of these elements by the nation's energy consumers. In effect, the administration has not made any of the hard choices.

"Unfortunately the administration has chosen to focus on production of new oil resources and nuclear energy enhancement, charting a dangerous course for this nation over the long term. The assumption that nuclear power will take care of our electrical needs now or in the future is misplaced. These proposals only address the symptoms of our energy problems, not the cause—our dependence on oil.

"How can we, as a nation, continue to rely on fossil fuels when we have only 2.7 percent of the world's oil reserves and use 30 percent of the world's daily supply?

"I believe the real elements of energy security, in effect our national security, are based on energy conservation and renewable energy sources. Where is the reliance on solar, wind energy, geothermal, and biomass?

"The administration is still using a sweet tooth, instant gratification approach when we need to be taking a substantive, meat and potatoes strategy to satisfy our energy appetite.

"An example of the continued reliance on easy but ineffective ideas is the placement of a provision to refinance the debt on power marketing administrations (including the BPA) under the heading 'Increasing Energy and Economic Efficiency'. This ill-fated proposal is nothing more than an OMB deficit reduction sham and has nothing to do with national energy policy."

The CHAIRMAN. Thank you very much, Senator Hatfield.

Senator Ford.

STATEMENT OF HON. WENDELL H. FORD, U.S. SENATOR FROM KENTUCKY

Senator FORD. I am somewhat like Senator Bradley. I think the important part here is to let Secretary Watkins testify. I had an editorial I wanted to read in its entirety, but I am going to forego that.

I compliment you, Secretary Watkins, on being a good military man, because this is not your energy program but you are marching to the beat of the Commander-in-Chief. I think he has surrendered, and he has given up on energy without a whimper. When it comes to foreign affairs, the President is a tail-kicking, name-taking kind of guy, just ask Noriega or Saddam Hussein. Domestic policy was another matter entirely. In his home arena, this Rambo bears a strong resemblance to Casper Milquetoast. He is unable or unwilling to take a tough stand, and I ask unanimous consent that the balance of that editorial be included in the record as if given.

The CHAIRMAN. We will include that.

Senator FORD. Unaccustomed as I am——

Senator FOWLER. This is not the Puerto Rican hearing, you know.

[Laughter.]

Senator FORD. No, but I am just as uptight about this one and maybe more so than Puerto Rico. Hell, they said you cannot speak

Spanish, and the other fellow said, hell, you cannot speak English, either.

[Laughter.]

Senator FORD. But I would have preferred, Admiral, that you had submitted your earlier recommendation that we reduce the octane we use in our automobiles and increase the air in our tires so we will get more miles per gallon than what you have submitted to us. It is, I think, unbecoming based upon what I know you think and about what I have talked to three at the table with you. We have talked a great deal about what you want to do and what you think we should do, and this does not reflect those conversations.

So, Mr. Chairman, under those circumstances I will have a question for the Admiral, just one, when my opportunity comes. I may not get it before 1:00 or 2:00, but I hope to be around.

Thank you, Mr. Chairman.

[The article follows:]

BUSH SURRENDERS

PRESIDENT GIVES IN ON ENERGY WITHOUT A WHIMPER

When it comes to foreign affairs, George Bush is a tail-kicking, name-taking kind of guy. Just ask Manual Noriega or Saddam Hussein.

Domestic policy, though, is another matter entirely. In his home arena, this Rambo bears a strong resemblance to Caspar Milquetoast. He's unable or unwilling to take a tough stand.

Never has this split personality been more evident than when the administration last week released its new national energy strategy.

Bush has sent about a half-million American men and women to the Persian Gulf to fight a war that will decide, among other things, who controls the Mideast's vast oil reserves.

No matter how right it is for us to fight Iraq, to stand against Saddam Hussein's aggression, to defend worldwide economic stability, this war still will exact a terrible toll. Americans are dying in the Persian Gulf. And although we haven't yet pounded Iraq back to the Stone Age, economic sanctions and around-the-clock bombing have so reduced fuel supplies in that country that Iraqi civilians have turned to horse-drawn vehicles for transportation.

But here at home, no sacrifices are demanded by our president. Bush can't or won't summon moral courage to stand against gas-guzzling automobiles, to ask Americans to pay a price for wasteful energy practices, to spend money on alternative energy sources, or even to encourage the development of a more efficient light bulb.

Bush's national energy strategy is devoid of all such conservation measures. There isn't even a token gesture.

(Apparently, the only domestic sacrifice Bush is willing to make in the name of energy independence is to let the Arctic National Wildlife Refuge undergo the environmental rape of oil drilling. And for what? The highest estimate of oil reserves—30 billion barrels—in this ecologically fragile area is equal to about five years of U.S. oil consumption.)

So long as our national energy policies ignore conservation, we have no change of weaning ourselves from the oil of the Middle East. And so long as that is the case, we can never ensure that future presidents will not face the prospect of sending young men and women to fight and die for oil.

The CHAIRMAN. Thank you, Senator Ford.

Senator Murkowski.

STATEMENT OF HON. FRANK H. MURKOWSKI, U.S. SENATOR FROM ALASKA

Senator MURKOWSKI. Thank you, Mr. Chairman.

Admiral, I, too, would like to join my colleagues in welcoming you to the committee. I think the significance that we have before us, an energy policy draft, is something that we have waited for with great anticipation. It will be interesting to see the disposition, because an energy policy implies and mandates decisions.

In order to make decisions, why, obviously there have to be compromises, compromises associated with alternative energy, whether they be nuclear or new technology. It will be interesting to see what extent this body is able to make decisions relative to a mix necessary to bring about a realistic energy policy.

We all say it is so fundamental. Why do we not have an energy policy? An energy policy mandates some very, very tough decisions. I know, Admiral, that the theme I continually hear is we have to do a better job of conservation, and I totally concur with that. Conservation alone will not do the job.

I hope you are able to emphasize the reality of what was happening with regard to oil demand. It was relatively flat in the United States, relatively flat in Europe, and relatively flat in Japan. The third world growth rate of oil consumption is better than 10 percent per decade, it is going to increase. There are 600 new cars per day coming on the roads of Taiwan, Korea and Singapore. As the standard of living increases, the demand of the third world countries is going to increase phenomenally. They are going to demand better standards of living, going to demand the things that we take for granted, and that is where the increase is going to come.

I am often reminded of the issue of CAFE standards, which is most appropriate and certainly has a place in this package. The first time we adopted CAFE standards was, I think, in 1974. We achieved a savings of about 1.5 million barrels per day. It was necessary. Within 6 months, we also brought on the Prudhoe Bay oil field, which brought in 2 million barrels. We needed both.

So I would hope that my colleagues would recognize that conservation alone is not going to achieve a workable energy package because if we look at the position of the United States today, we are importing 50 percent of our oil. Approximately 25 percent or half of the 50 percent is coming from the Mideast. My colleague from Oregon has indicated that we are over there because of oil. There is no question about that. We are over there to stop naked aggression.

We alone in this country cannot by any measure or means of conservation address the demand for oil that is taking place, because it is a worldwide commodity, and the third world nations are going to increase consumption. We must do a better job of saving.

Nevertheless, we simply have to get back the reality that we have to have areas such as ANWR because it is in the national energy security interest of our Nation to know whether there are reserves there or whether there are not. As we look at Prudhoe Bay, what are we doing? We are decreasing that field to 10 percent per year because it is on a decline. We are at an all-time low in domestic drilling in this country. Projections continue to show us at a decline. We are producing less oil in the United States each year. We can do a better job of conservation. I will support further conservation.

The realities are very real, and in this policy that you have proposed we have an interesting strategy here. The Chairman has introduced an energy package that is very broad and encompassing and one that I think has been well thought out. 65 to 70 percent of it is funded by ANWR.

Now if the environmental community strips ANWR out of the package, where are the funds for all of the alternative technology that we need in this country?

In your package I am not sure how the funding is going to occur, but I think it is very appropriate that this committee reflect on the reality of what is before us. I have a bill in to open up ANWR. The Chairman has a package that is totally encompassing, and the administration now has a package that is totally encompassing. There is no free lunch around here. Something has to finance it.

So I would remind my colleagues that it seems to me that ANWR becomes the linchpin, if you will, or the cornerstone, because if you pull it out you do not have the funding to achieve what is absolutely necessary. That is alternative energy, technology, and reclamation, which the Chairman feels so strongly about.

So it seems to me that the bottom line is very evident. We need to conserve, but we, ourselves, cannot control oil because oil is a worldwide commodity. I hope as you go into your presentation, Admiral, that you are able to substantiate some of the realities associated with the world demand of oil and the reality that we all are in this thing together.

Mr. Chairman, I think I have made the points that I had wanted to make, and I look forward to the presentation by the Admiral.

The CHAIRMAN. Last on our list is Senator Bumpers.

STATEMENT OF HON. DALE BUMPERS, U.S. SENATOR FROM ARKANSAS

Senator BUMPERS. Mr. Chairman, I will be very brief. We really came to hear Admiral Watkins.

I have not had an opportunity to look over this proposal in depth, Admiral, but I will say that I have heard many of these arguments many, many times since I have been in the Senate and joined this committee 16 years ago. I have especially heard those arguments how we are going to produce more oil. And I heard all those arguments in 1981 and since then, or at least in the last few years.

As you know, domestic oil production has been declining at the rate of about 400,000 barrels or 500,000 barrels a year.

And the second thing is it seems to me that whether we become independent of Middle Eastern oil depends almost as much on them as it does on us. And when I say that, I think that the deficiency in this whole plan is the refusal to have more mandates in it.

And I recognize, for example, everybody's antipathy for Government interference with the marketplace. But if we had not passed what are now called CAFE standards back in the late 1970's the American automobile industry would really have been in bad shape. Nobody believed people were going to continue to buy those little Japanese cars. And above all, the American automobile industry did not believe that.

But we were buying them as fast as they could unload them off of the boat. And if Congress had not forced CAFE standards when we did the domestic industry would have been in a lot worst shape.

Now, there are no CAFE standards in this plan. There are some studies that show that, for example, a 40 percent increase in CAFE standards over the next 10 years would save more oil than the wildest, optimistic guess as to what there is in the Arctic National Wildlife Refuge. I know there is probably oil there. And I do not quarrel, I do not even quarrel with the 3.2 billion, which is the highest figure I have seen, 3.2 billion barrels that might be found there.

My reluctance to vote to open ANWR is based simply on the fact that I think it gives people, what shall I say, a feeling of optimism that is not justified. You and I both know that if there were 3.2 billion barrels there that would last the United States about one fourth of a year, maybe less.

So what are we going to do in this country if we just have sort of voluntary conservation proposals, some economic incentives to drill and that sort of thing and oil goes to $5 a barrel in the Middle East? And I have seen at least one reputable analysis that suggests that within 6 months after this war is over it could very well go that low.

Now what are we going to do when we do all of these things and the Middle Eastern countries, OPEC, decide to cut the price to $10 or $5 or whatever they want to cut it to? That sort of puts us out of business unless we have very stringent, mandatory conservation standards in this plan.

I think this is one place where people are ahead of everybody else. You do not have to be broke out with brilliance to think about energy policy—for example, I have three great children. Sometimes they are so great I think Betty is going to tell me they are not really mine.

[Laughter.]

Senator **Bumpers**. And I have one grandson. And when I think about what we are doing, especially to the grandson, 2-years old, for the future, I am absolutely appalled. The dearest people in my life that I would sacrifice my life for, and we continue to just roll this whole energy problem like the deficit into the future to let them pick it up.

A New York Times poll recently showed that 85 percent of the people in this country think that we have to do a lot of things to become energy independent.

But, second question, have you done anything since the outbreak of the Iraqi war? Only 3 percent said they had changed some of their energy consumption habits.

I do not like the idea of telling people you have to do certain things. But I am just saying that unless we do that, it seems to me we are still putting our future in the Middle Eastern oil.

Thank you, Mr. Chairman.

The **Chairman**. Thank you, Senator Bumpers.

You have gotten a lot of advice, Secretary Watkins. I want you to know it is all good and I agree with it all.

With that, would you please proceed.

STATEMENT OF HON. JAMES D. WATKINS, SECRETARY, DEPARTMENT OF ENERGY, ACCOMPANIED BY W. HENSON MOORE, DEPUTY SECRETARY; LINDA G. STUNTZ, DEPUTY UNDER SECRETARY; AND STEPHEN A. WAKEFIELD, GENERAL COUNSEL

Secretary WATKINS. Thank you, Mr. Chairman. For my formal testimony today, I would like to ask you and the committee to enter into the record the National Energy Strategy executive summary.

The CHAIRMAN. Without objection.

Secretary WATKINS. I would like now to proceed with an oral presentation of the National Energy Strategy and would like to use the charts, if I can, here. We have put some charts back here so those in the audience can also see.

The President's charter for the National Energy Strategy was given to us on the 26th of July 1989. So in the 18-month——

The CHAIRMAN. Could you move the microphone just a little closer, please?

Secretary WATKINS. In the 18-month process we have had 18 hearings, 448 witnesses. We have had representation from 46 States and we have received 2,000 written submissions, all of which we take very seriously.

We put out an interim report in April of 1990 which was a compendium of public comments to show the complexity and the breadth and depth of the issues surrounding the generation of an energy strategy that meant anything.

Since that time we have had 7 months of intensive interagency analysis and we have had five Economic Policy Council meetings, two with the President.

The Economic Policy Council is made up of most of my colleagues in the Cabinet. There were serious meetings. They were tough arguments, just as there would be on Capitol Hill and on some of the issues that were brought up by the members here this morning. And they were excellent. They were honest brokers, in my opinion.

They forced us to do the economic analysis, some of which had never been done before. They put into context some of the modeling. We had to straighten a lot of things out in that process that gave us an ability to feel comfortable that we have probably the best comprehensive analysis that has ever been done on energy.

The complexity and depth of the modeling systems and the quality of data that we have developed through this process, in my opinion, is second to none in the world. This capability is new and it is bold, both for Government and the private sector, and all will have access to this data base.

I think you will see that we, for the first time, have the ability to compare our data with data that comes in from other studies and sources. We are ready to put that data on the table for your members and staff up here so that we can begin to iron out the differences which lead us to different conclusions on how we might approach the subject, such as in the area of CAFE standard setting.

We have accomplished our mission and we have laid a foundation for the future. I would like to make five points.

First, an historic perspective, never before has there been a strategy compiled to reach the objectives of energy security, environmental quality, and affordable energy through an integrated approach combining free market incentives, reduced regulation, and Federal investment in research and development (R&D).

Past attempts have relied on controls, taxes, subsidies, and regulations.

Two, Government alone is not the answer. The strategy lays the foundation for our future by protecting and improving our standard of living and increasing the international competitiveness of American industry. It addresses the challenge of supplying our necessary energy without imposing harsh command and control measures, such as taxes on our people and restrictive regulations on business and industry, which would reduce our standard of living and economic stature.

American ingenuity, technology, and competition, in my opinion, beat Government regulation and taxation every time.

Three, this is a balanced strategy. As one of the members pointed out, America cannot solely conserve its way, nor solely develop its way to energy security.

Four, this is a national plan, not a Federal plan. It forges a path of shared responsibility with industry, Government, science, and the American people.

Point five, I believe in this set of documents we have some powerful ideas for America's future. There is no single, simple answer to America's energy challenges. This comprehensive strategy includes nearly 100 ideas, all converted to action initiatives affecting virtually every aspect of the way we produce, use, and transport energy.

Before I begin to review the key elements of the strategy, Mr. Chairman, I would like to applaud you and the committee on two things that were touched on during various comments. First, that you have seen the merit of a comprehensive energy strategy. There are 76 bills that have been interested in both Houses of Congress.

And when I look at the content of those bills, if we were to continue the fractionated approach that we have for these past 10 years on how to deal with energy issues, we would never get there from here.

But here for the first time we have a repository for those bills that make good sense, to find their place within this strategy. And I do not see one bill that does not have a place in the strategy. There are not that many new ideas left. They are all there and there is a place for them.

And we can work with the committees, here and in the House of Representatives to work many of those proposals out.

Your bill has so many elements of compatibility with ours. There is a bill coming up in the House signed by 30 members that will be very compatible. So I think this whole concept of comprehensiveness is absolutely critical, that we keep it as a comprehensive bill and not allow the kind of piecemealing that in the past has resulted from constituency pressures and that sort of thing which has really biased any kind of ability on our part to pull together something in a cohesive fashion.

Two, on timing, if we do not do this in 1991, I do not think we are going to have an energy strategy. And I think we have to do it now while the momentum is there in the Nation and while the American people are calling for something that is worthwhile.

I know it is going to be tough. And I know some of the House leadership have said you are not going to get anything before 18 months. But I applaud your time frame. And I am going to do everything I can to work with you and the members up here to, at least on the Senate side, push that as hard as we can to try to get a sensible, comprehensive package in this session of Congress.

I would like to turn now to the energy strategy itself. First, I would like to talk about what the National Energy Strategy will accomplish regarding energy security.

The reality is the United States and the rest of the world will continue to rely on oil for the foreseeable future, and Persian Gulf producers will remain critical players in that world oil market.

As figure 1 (figure 23 in the National Energy Strategy) here on the board indicates, and let me just briefly explain what is on the board. Millions of barrels per day on the ordinate. Abscissa, of course, is time. You see 1990 where we are today, the total U.S. production in the light blue, oil imports in the dark blue.

The current policy base of the National Energy Strategy can be found in Appendix C to the main body of the report in the thicker version. And it should be understood what is exactly in there and what is not in there. And I think that is important when we begin looking at the analysis.

You see down below, the current policy base as well. In other words, if we do nothing more than is now kind of in the law and in the regulations, that is where we are headed.

Now in the case of reducing demand, you can see the arrows pointing down in that regard, from the top, which is a result of the energy strategy. And you can see the increased supply coming up from the bottom, a result of the energy strategy. The series of vertical white lines—you will see them on several graphs and I will not mention it again—represents the degree of uncertainty in the analysis in the out-years, and that is a fair way to express both optimistic and very conservative approaches to the results of our effort to achieve the strategy goals.

Now figure 1 then illustrates, that the National Energy Strategy, attacks the challenge of increasing energy security in a balanced way by reducing our need for oil by 3.4 million barrels a day by the year 2010, and increasing domestic supplies of oil by 3.8 million barrels a day by the year 2010. On the demand side——

Senator **Bumpers**. With your indulgence, Admiral, you are talking about decreasing what it would otherwise have been if we did nothing, are you not?

Secretary **Watkins**. Yes, sir. Well, if we do nothing further. But there is a lot today that you have done on Capitol Hill. Past administrations have done a number of things. Of course, in the baseline of the strategy then, is the defined current policy base so you know every single thing that is in that policy base.

The Clean Air Act Amendments of 1990, for example, is one that we have not put in the current policy base. The Clean Air Act Amendments of 1990 are in the National Energy Strategy as a separate increment, depending upon how you look at this, and that has to be understood. So there is a lot that the Nation has been doing. It is not just completely sitting idle. We have done some goods things. And those are in the current policy base. But clearly, it is inadequate to deal with the kinds of challenges we have for the future.

On the demand side, the aim of the NES is to introduce alternative fuels and technology, expand the use of domestic natural gas, and increase the efficiency of all of our vehicles. And we do this by using alternative fuels in fleet vehicles; second, by accelerating research and development on electric, gas turbine, and fuel cells propulsion systems and on high-efficiency conventional engines; third, by intensifying research and development on more efficient industrial processes and aircraft bodies and engines; and fourth, by scrapping older cars, increasing ride-share/commuter benefits and wider use of intelligent vehicle highway/systems.

On the supply side, the aim is to use superior production technology and environmental safeguards to increase domestic production, including advanced research and development for enhanced oil recovery technologies, access to a discreet portion of the coastal plain of the Arctic National Wildlife Refuge, and access to certain portions of the Outer Continental Shelf.

Internationally, the NES proposes diplomatic and trade initiatives to expand production capacity in areas outside the Persian Gulf, mainly in the Western Hemisphere, Europe and developing nations, and further, to expand strategic stocks.

Next, I would like to address the subject of what the NES will accomplish regarding imports. On this slide, figure 2 (figure 24 in the National Energy Strategy) you see again, imports in millions of barrels per day, plotted against time, the current policy base extended, and then what would happen if we implement this strategy.

As it illustrates, in less than 20 years, without the NES, imports could rise to 65 percent of domestic consumption. I would like to say here that imports, themselves, are hardly the villain. It is those elements of imports that come from unstable and unreliable regions, and we recognize that. So I do not want to run down imports. We have good imports from Venezuela. We have them from the Brent Fields in the U.K., and so forth, and I do not think that is in the minds of most people when we talk about energy security.

But I do think it is an understandable graph that most people can relate to, and it certainly gives us some kind of feeling that we can control our destiny in imports to a certain extent.

Working in tandem with other administration initiatives, the NES proposal will reduce our oil imports by 3 million barrels a day in the year 2000, almost 6 million barrels a day by the year 2005, and 7 million barrels a day by the year 2010. In addition, our vulnerability to market disruptions can be substantially reduced if worldwide production capacity is increased, especially outside unstable areas.

For example, undeveloped world resources could be as high as 1 trillion barrels outside the Persian Gulf. However, development of these resources is hampered by institutional and trade barriers, lack of development capital, and access to technology.

To redress these obstacles, the NES proposes diplomatic and trade initiatives aimed at improving energy cooperation, especially in the Western Hemisphere, but also in Eastern Europe and elsewhere. And I think we have sent this Committee and its members copies of a recent study we have run on hemispheric energy security which I think is worthy of your attention and would be the baseline of policy considerations for future efforts, particularly with Mexico, Venezuela, and continuing with Canada to the north.

The availability of excess production capacity, especially outside the Gulf, will increase the market's ability to withstand oil supply disruptions and reduce spikes in price. Additionally, NES measures are proposed to expand U.S. strategic stocks and to encourage our friends and allies to do the same.

And finally, the important regulatory reforms contained in the National Energy Strategy for the natural gas market will expand U.S. fuel-switching capabilities and increase the Nation's flexibility to respond to unforeseen events in the oil sector.

Next, I will ask the question, what will the NES accomplish regarding energy efficiency and conservation. I think this is one of the most revealing charts that I can display here today. On this chart (figure 3), we see on the ordinate then, quads of energy. A quad of energy, as is noted at the bottom, is equivalent to about a half a million barrels a day of oil for 1 year. The Nation is operating now with total energy, all sources, at about 80 to 85 quads of energy. So it gives you some reference base.

The zero reference line there is what we have previously referred to as current policy base, though we have normalized everything to the current policy base, and you can see what we are doing to enhance energy supply and to drive down energy demand.

While we made great strides in the last two decades, this is probably more in the late 1970's, to improve energy efficiency, the NES will do much more, as evidenced by the trend lines in this figure. To increase efficiency in the production and use of energy, the NES proposes over 3 dozen initiatives covering regulatory reform, R&D investments, and greater competition and technology choice.

I think it is important, if you just take a glance at the executive summary between pages 10 and 13, you will see a very significant menu of efficiency items, just in that one section alone, and they are presented throughout the report.

The President's fiscal year 1992 budget includes $903 million for NES-related research and development, an increase of $227 million or 34 percent over that which we would have come forward with had we not pushed the National Energy Strategy. And this is additional funding for R&D, supporting the NES Government-wide initiatives. This is all branches of Government. We had some 15 different agencies involved in developing the energy strategy, including the Department of Transportation, Department of Interior, NASA, and others with whom we work.

As you can see, the NES will result in a reduction of total primary energy demand by 7.5 quads in the year 2010, nearly 13 quads by 2020, and more than 17 quads by 2030 from the current policy base case as shown along the zero line.

The NES proposals include enhanced competition in the generation of electricity while protecting consumers; reform of hydropower and nuclear licensing, and extensive reform of the natural gas regulatory system; encouraging efforts to remove regulatory disincentives to utility investment in energy efficiency; tax-free treatment of utility discounts to consumers for efficiency investments; cost-effective appliance and equipment standards, and expanded testing and labeling for lights and other equipment; expanded mortgage financing incentives for energy-efficient homes, more energy efficient public housing, and stronger building standards; accelerated research on more efficient building technologies and industrial processes, enhanced R&D to develop more efficient and less polluting electricity-generating technologies, including renewables, nuclear, and clean coal; and removal of disincentives for use of waste minimization technologies.

Now this figure shows that the NES will make us substantially more energy efficient and less vulnerable to oil price shocks. In fact, there is a very important graph in the front of the National Energy Strategy which deals with the resilience of the Nation to respond to oil shocks. And the graph shows there in the front, a relationship between barrels of oil per unit of Gross National Product. And I think it is very important that we understand where we sit right now regarding that particular index. We sit about one-half of where we were in the 1970's when we really had a shock.

I think the reason that the Nation has come out of it this time is there have been many mechanisms set in place such as the International Energy Agency, the Strategic Petroleum Reserve (SPR) with nearly 600 million barrels of oil sitting there, and in fact, now over 1 billion barrels in strategic stocks worldwide through the IEA mechanism.

So I think we have a greater conscientiousness, much greater flow of information between nations, because this is a worldwide fungible stock and we are not in control of it anymore and we have got to understand that.

So I think it is very important that we recognize, and we did not brief that here today, because it is rather a complex curve and unless you go through it in great depth to find out exactly how you derived all those figures, it is a little bit tough to deal with. But it is a very important index of resilience of the Nation to respond.

The Japanese, for example, are at one barrel of oil per $1,000 of Gross National Product today. We are at three. That means we are going to have three times the impact that they have, even though they are an oil-dependent nation. Why that is the case is defined in the strategy. You have got to understand the differences between our nations, our sizes, the mileages, the standards of living. All those issues are addressed in the strategy because it has been at the focal point of a lot of discussion about why do they do this and we do that.

Now, by the year 2010, then, as I pointed out, the NES will have the effect of reducing energy demand by 7.5 quads, while energy supply will need to increase only by 4.3 quads. Now said another way, then, the National Energy Strategy has leveraged energy demand reduction at nearly twice the rate of energy supply enhancement by the year 2010. As you can see from the slope on the curve, it is going to be much greater thereafter.

And I do not believe that is false hope. I do not think it is playing with mirrors. We have all the data to base this on, and we have the kinds of science that we can grab in the near-term to ensure we can achieve the objectives within the degrees of uncertainty explained in the charts.

Now, what will the NES accomplish regarding energy and the environment? Let us turn to figure 4 (figure 7 in the National Energy Strategy) now, and I think this is very important. It is the first time this has really been displayed. The NES will bring environmental and energy objectives into harmony. The National Energy Strategy measures that improve air, land, and water quality include, first, increased use of cleaner-burning fuels and technologies such as natural gas, nuclear, and renewable energy; development of model programs for siting energy facilities; and minimization of waste.

The NES will reinforce objectives of the Clean Air Act Amendments of 1990 by contributing to long-term reductions in acid rain and smog. For the global environment, NES initiatives go beyond the Montreal protocol and the Clean Air Act Amendments to keep U.S. emissions of greenhouse gases, measured by their global warming potential, at or below 1990 levels well after the year 2000.

Again, you will see the note on the chart of what is global warming potential in billions of tons. By billions of tons here, we mean billions of metric tons of CO_2 equivalents. This is used by the International Panel on Climate Change (IPCC) of the U.N. and is a very standard measure of global warming potential.

But you can see the trends, with the Strategy, are significantly down from that which has been often talked about, that somehow the Americans are not doing their part in the whole global warming debate. And we believe that is significant, that we are doing something, and it is the outcome of the Strategy, not someone setting a target and a date out of their hip pocket who has not done the economic, the technical, the scientific, and other analyses.

So we think for the first time, we have something very solid to enter into our framework studies through the IPCC network, and to be ready for the debates in the United Nation in 1992. And frankly, I think that we have done more than any other Nation in the world, and we have the facts now to prove it. So we are serious about this, even though there are uncertainties in the linkages between global warming that we know is taking place and the greenhouse gas function.

A key contributor to a more secure and environmentally sustainable energy future will be our commitment to science and engineering research, technology transfer, and science and math education. We have also passed out to this committee the very extensive work we have done in science and math education to carry out the President's and the National Governors' Association goal to be number one in math and science by the year 2000.

We cannot carry out this National Energy Strategy without having the human resources come right along with it. We would be kidding ourselves. And therefore, I hope this Committee will strongly support those initiatives to achieve this national goal, because it is an important part of the National Energy Strategy, just as is technology transfer. So we can get additional economic underpinnings by commercializing many of these new initiatives coming out of this tremendous R&D investment before they are sold cheaply offshore to lose all that leverage on economics.

The NES contains specific measures to achieve these objectives. They include maintaining Federal basic science portfolios, ensuring the viability of U.S. research facilities, and expanding international collaboration on mega-research projects. And that is going to be the way of life from now on. We have to look to the world to help us out in a variety of areas, including fusion research, because of the funding deficit problems that we have here.

And I think when we get into these big projects, we are going to have to do a lot more work in that regard, and we have commenced that already with foreign nations to make sure we are on the right track in funding these things that can be beneficial for mankind.

We have also increased industry's participation in R&D and commercialization of technology. We have set up programs and your committee has helped us, passed legislation, very important legislation on technology transfer to permit us to do these kinds of things through our great national laboratories, which are underutilized in relation to industry in terms of getting market pull indicators early, working with them, burden sharing, and moving this technology into "Made in USA" quickly. We are also strengthening the Federal support for improvement of math and science education, as I pointed out.

Now, I would like to shift to addressing some of the criticisms that we received up front. We do have a basic philosophic disagreement with many of the critics who come at this from a different direction than we have. Many of them want Government control to dictate how we run our lives. We believe that incentives are a better way.

Governmental loan is not the answer, nor is there a single, simple solution. This strategy lays the foundation for our future, by protecting and improving our standard of living and increasing the international competitiveness of American industry.

It addresses the challenge of supplying our necessary energy without imposing either harsh command and control measures, such as taxes on our people or restrictive regulations on business and industry, that would reduce our standard of living and our economic competitiveness.

And let me talk about two examples of philosophic disagreement. First, mandated miles per gallon standard for our automobiles, commonly referred to as CAFE, Corporate Average Fuel Efficiency.

Forced higher CAFE standards only reduce oil consumption if Americans buy smaller cars and if they drive smart, that is, they are not restricted in the number of miles they drive. The higher standards still leave the transportation sector totally dependent on oil. And I thought the name of the game was to reduce our dependence on oil.

Even if we could average 40 miles per gallon for new cars in the year 2000, the oil savings in 2005 would be about 500,000 barrels a day. Now, we need to sit down with those that say it is going to be 2.8 million barrels a day and reconcile the differences. We believe this number (500,000), which is in agreement with EPA, is the right number, and we have the data to back it up.

Remember that the Strategy itself pushes miles per gallon, if we do nothing else today, to 31 miles a gallon over the next 8 years. And so there is already a drive, Clean Air Act and the National Energy Strategy, moving in that direction. So let us give credit where it is deserved and let us not add up figures to make it look worse than it is. It is our belief that we are going to beat the real CAFE oil savings 3 to 1 by our alternative fuels concept, which is a better way to go in our opinion.

The Department of Transportation analysis indicates that safety would be severely jeopardized by going immediately to a 40-mile per gallon objective. And we had that debate last year and I think our positions are still solid, and nothing we have learned new in the NES would change those positions that for smaller cars mean more injuries and deaths.

The NES addresses the causes and not the symptoms of oil dependence by developing new fuels and superior, alternative technology.

The NES, in tandem with the 1990 Clean Air Act Amendments, will reduce oil consumption in transportation, not by the half a million barrels per day of a 40-mile per gallon CAFE standard, but rather by 1.5 million barrels a day by the same year, 2005, and by 3 million barrels a day by 2010.

The NES would break transportation's total oil dependence by providing fuel and technology choice, diversification of fuels, for example, as the President mentioned yesterday.

The NES will dramatically reduce emissions from cars and trucks beyond that of the Clean Air Act Amendments.

The NES will preserve American technological leadership and expand consumer choice, and will accomplish these goals at lower costs.

It is interesting to note that we have better than 50 MPG cars today sitting in the showroom that the American people, in general, do not want to buy. And we have to consider that in the process, unless we are going to mandate that there cannot be any others and those are the only ones they can buy.

So I think all of those issues have to be considered as we go into this. And this is why we have taken the position in our energy strategy that we want a competent, technical group to put the envelope of human safety around this issue, to bring in what is feasible technologically and the economic soundness, and we want it fast. And we have worked with Secretary of Transportation Skinner to bring that about by June of this year.

So I hope that is going to influence our thinking as we finally get into the discussions of closing out a good, solid, comprehensive energy strategy this year, by coming to grips with those issues that have been more emotional, in my opinion, than based on sound analysis.

Another example that I would like to mention is forced conservation. Some would achieve energy conservation by limiting choices and requiring Americans to change their lifestyle. I have not seen many come forward with a lifestyle study of what they are going to ask the American people to do. Every time they do, they get voted out of office. So there is a hesitancy. It is easy to talk about lifestyle changes they are going to impose on Americans, but nobody wants to come forward with it except to give it to the Department of Energy to worry about.

And so, my belief is that we are not going to have that kind of forced conservation, but we can tend to move Americans by leadership and persuasion in the right direction. I think this strategy does that, and it does it about as fast as the traffic will bear.

The NES reduces oil consumption in transportation by fostering use of alternative fuels and technologies, and by developing advanced conventional engines that use less oil; in industry by investing in R&D to improve efficiency of the manufacturing processes and by eliminating barriers to greater use of domestic natural gas; in residential and commercial buildings by encouraging the use of better shells, appliances, and equipment and providing access to more domestic natural gas.

The NES reduces demand for electricity by investing in integrated resource planning, by providing tax-free treatment to utility efficiency rebates provided to consumers as electricity rate discounts, through improved appliances and equipment standards and new testing and labeling.

The NES also reduces consumption of polluting fuels by increasing R&D investments in renewable energy and extending tax credits for solar and geothermal. This is the first time that a Republican administration has ever agreed with Capitol Hill that we should extend the tax credit. And I think that, in itself, was a major accomplishment on our part to move this bill, move this Strategy up to the Hill. So that is a good going-in position in my opinion, to be on the side of reality that always comes our way by Congress extending that every year anyway. And we thought it was a good idea.

The NES reduces consumption of polluting fuels also by increasing use of natural gas and hydropower, accelerating development of clean coal technology, developing advance nuclear reactors.

The NES reduces consumer energy costs, in addition to all of these, by increasing fuel and technology competition, reducing the cost of regulation, lowering utility bills through energy-efficient public and private housing, and nontaxed utility rate discounts, and providing adequate supplies of energy at lowest cost.

The NES will help us accomplish all these reductions without damaging the standard of living of most Americans or hurting competitiveness of American industry and business.

Now in summary, then, the next slide, implementing the shared responsibility approach of NES, in the year 2010. And 2010 is a very important number. And we recognize that beyond 2010 it is difficult, in any modeling system, to project the real environment.

But we feel very good about 2010 to the extent we can show the uncertainties on our various graphs that you saw. Those projections involve generally technologies that are now nearing completion in their basic research work and seem to have the market pull. And so we are relying on the knowledge of business, industry, and our laboratories, our universities, who have given us this tremendous research base in this country. In the year 2010, the NES will:

Reduce oil imports from 65 percent to between 40 percent and 45 percent; reduce oil use by 3.4 million barrels a day, and increase domestic oil production by 3.8 million barrels a day. So that is nearly in balance on that one index alone.

Increase electricity produced from renewable sources by 16 percent. I would have to say on that one that when you go beyond 2010, you begin to soar and almost double that in the next 20 years, and I believe that is clearly possible.

Next, increase use of alternative transportation fuels and technology by up to 3 million barrels a day.

Reduce U.S. emissions of greenhouse gases at or below 1990 levels.

Save consumers more than $90 billion in energy cost.

And in addition to these on the chart, there are a couple of more I would like to mention. In the year 2010, we will consume considerably less oil for each unit of Gross National Product (GNP) we produce, and that means that future oil shocks will be significantly less and will be down approaching the unity of barrels of oil per $1,000 of gross national product that now pertains in Japan. And not that I am trying to compare the U.S. with Japan, but it is a measure of resilience of the Nation to respond.

We will reduce the total energy demand by 7.5 quads and increase supplies by only 4.3 quads. So when people talk about not doing enough for conservation efficiencies, not cutting that demand, our data show that is not the case at all with this strategy. In fact, we are doing it at twice the rate by the year 2010, in accordance with the figure 3 that I showed you earlier.

We also enhance air quality by reducing emissions of pollutants' contribution to acid rain and smog, even beyond that of the Clean Air Act Amendments.

So these are powerful ideas for America that we think will be implemented through the shared responsibilities of Government, science, industry, and the American people.

And we will open ourselves up to questions at this time.

[The material submitted by Secretary Watkins follows:]

DOE NEWS

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FOR IMMEDIATE RELEASE
February 20, 1991

PRESIDENT RELEASES NATIONAL ENERGY STRATEGY

WASHINGTON, DC -- President Bush today presented the National Energy Strategy (NES) to Congress and the American people.

Calling the Strategy "powerful ideas for America", Secretary of Energy James D. Watkins said, "The NES is a strategy that, for the first time in our nation's history, lays a comprehensive foundation for a cleaner, more efficient and more secure energy future. It is a balanced approach to attaining that energy future through shared responsibility."

Implementation of the NES will decrease the U. S. economy's demand for oil by 3.4 million barrels a day while increasing domestic oil production by 3.8 million barrels a day by the year 2010. It will also result in the increased availability of electricity produced from renewable sources and could increase the use of alternative transportation fuels and technology by up to 3 million barrels per day in 2010.

The strategy also has a dramatic positive impact on the environment. It will reduce the potential threat of global warming, enhance air quality, improve water quality and address solid waste problems.

The NES is the result of more than 18 months of intense effort. It incorporates input of 448 witnesses from 46 states and reflects ideas from a vast array of energy experts and the general public.

The Strategy was requested by the President in July of 1989--more than a year before the Iraqi invasion of Kuwait. The President directed the Department of Energy to work with federal agencies and the American people to craft a National Energy Strategy that emphasizes markets to balance our increasing need for energy at reasonable prices; our commitment to a healthier, safer environment; our determination to maintain an economy second to none; and our commitment to reduce reliance on insecure energy supplies.

To achieve these goals, the NES proposes federal, state and private sector initiatives to remove barriers to an efficient domestic energy market. The NES will increase competition and economic growth and use America's technological and scientific skills to develop environmentally superior energy technology.

-- more --

"As a nation, we have no single, simple solution to our energy problems, but this strategy puts us on the right track. It is a strategy that recognizes a true shared responsibility, joining the commitment and resources of industry, government, science and the American people," Watkins said.

"We know from experience that we can neither solely produce nor conserve our way to a secure, environmentally sound and affordable energy future. We will need to do both, and to do it in a way that doesn't penalize our economy, our people, or our environment. The NES will do just that -- it will protect the pocketbooks of U.S. consumers, the jobs of U.S. workers and the global environment. The NES demonstrates that environmental, economic and energy objectives can be brought into balance."

Watkins noted, "Eighteen months ago the President knew we could not wait for a crisis to chart a course for our energy future. That is why he directed the Department of Energy to devise a balanced blueprint to address this country's energy needs for the next forty years."

The NES represents a balanced program of greater energy efficiency, use of alternative fuels, and the environmentally responsible development of all U.S. energy resources.

The NES redefines America's energy security interests by addressing the structure and not the symptoms of today's energy markets. The NES attacks the challenge of energy security by an aggressive program to introduce alternative fuels and technology in transportation, to reduce oil demand, to expand production capacity outside the Persian Gulf and to expand strategic stock holdings.

Investing in American ingenuity and know-how is a far better way of achieving our energy objectives than relying on command and control measures, such as increased government regulations and taxes. A major element of the NES is increased investment in energy technology R&D, including more than $900 million in FY 1992 (a 34 percent increase) for investments in support of NES R&D initiatives government-wide.

Building on other Bush Administration actions, the NES measures will result in United States' greenhouse gas emissions remaining at or below 1990 levels for the foreseeable future. Taken together, the NES initiatives are expected to decrease U.S. oil consumption by 3.4 million barrels per day below projections for the year 2010 and increase domestic oil production by up to 3.8 million barrels. This balanced program would cut projected oil imports in 2010 by one-third, from 65 percent to between 40 and 45 percent of consumption.

The NES includes 17 chapters surrounding four basic themes: "Increasing Energy and Economic Efficiency; Securing Future Energy Supplies; Enhancing Environmental Quality; and Fortifying Foundations."

-more-

Members of the news media may obtain copies of the NES by calling the DOE Office of Public Affairs, (202) 586-5805.

-DOE-

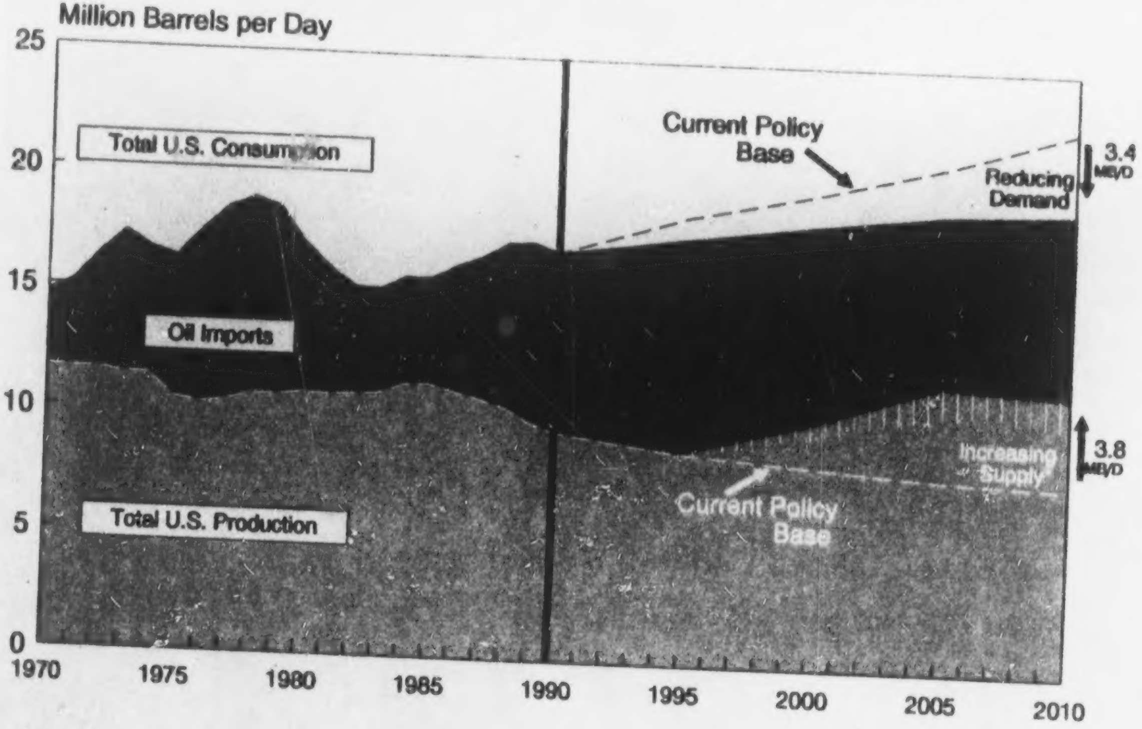
COPIES OF THE NES MAY BE OBTAINED from the U.S. Government Printing Office, Superintendent of Documents, (202) 783-3238. Order numbers and prices:

Full Document -- $16.00; Stock # 061-000-00754-7

Executive Summary -- $2.25; Stock # 061-000-00755-5

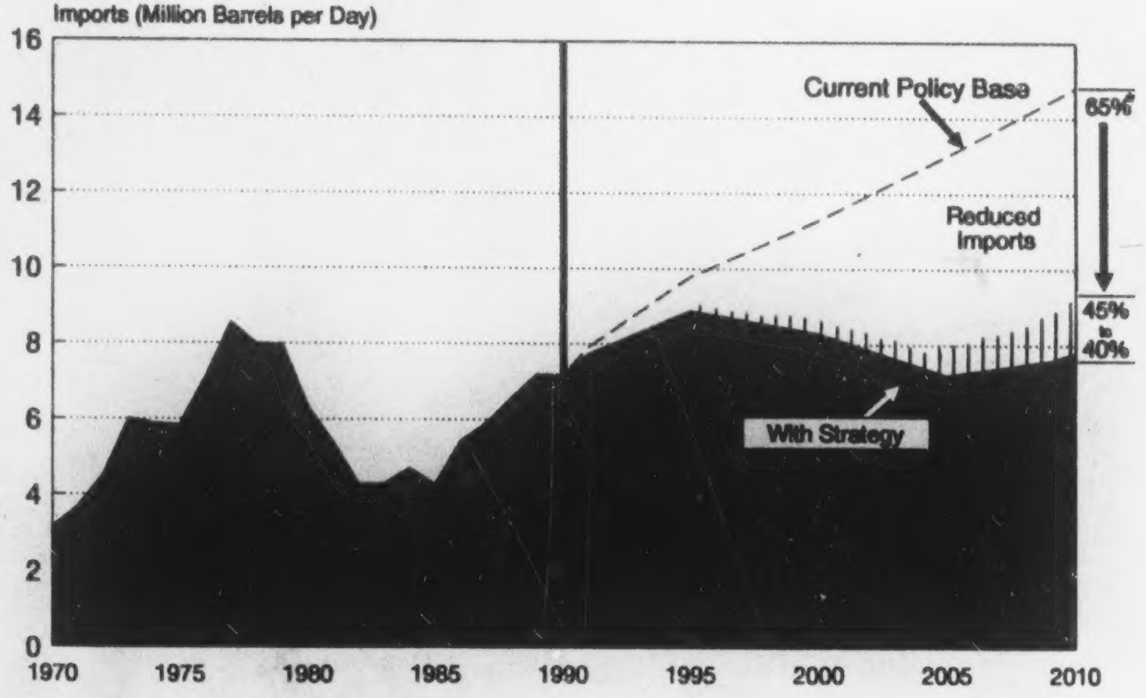
R-91-036

Effects of the National Energy Strategy
on U.S. Oil Consumption and Production



*Production range represents uncertainty associated with R&D

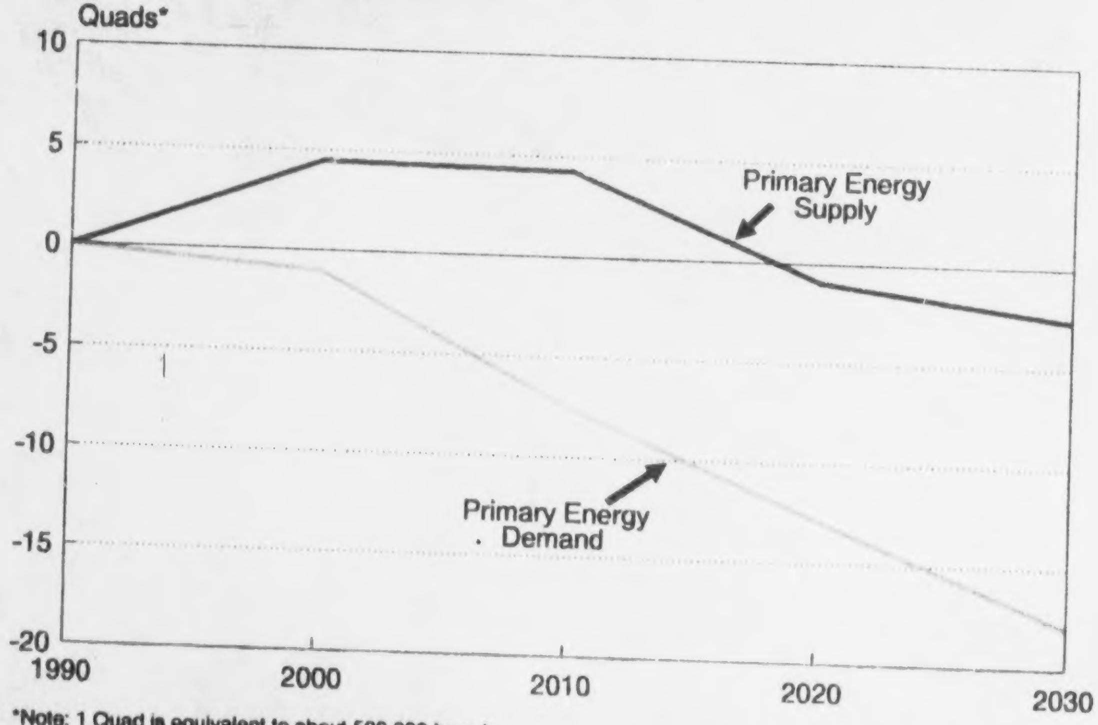
Reduced Oil Imports



*Note: Imports as percent of total oil consumption.

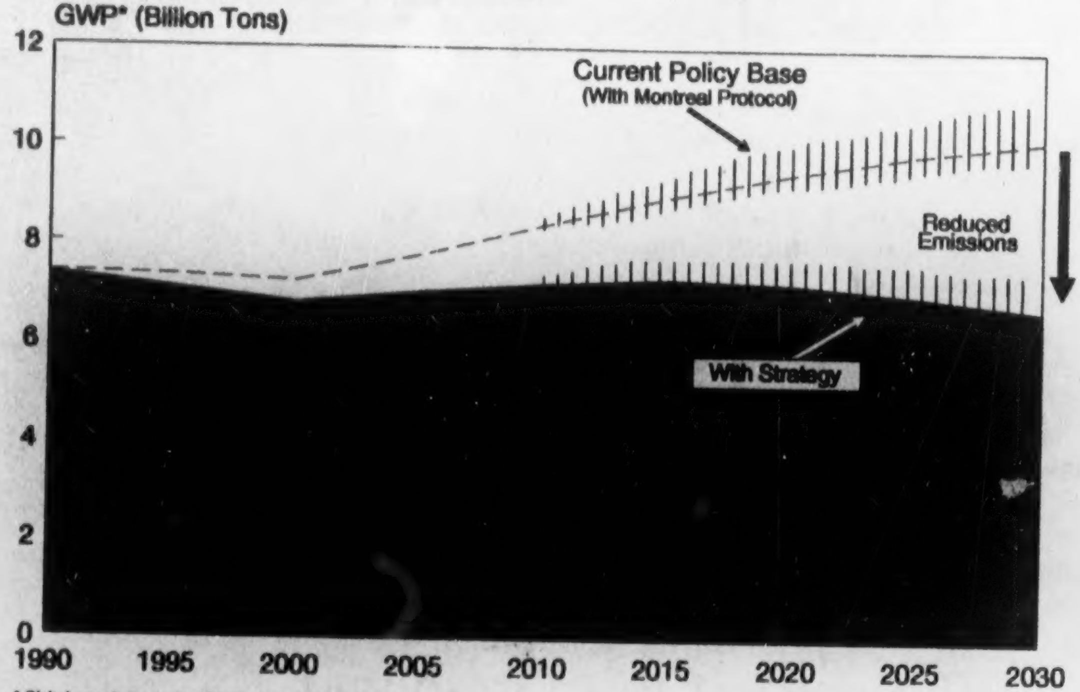
Effects of the National Energy Strategy

Changes in Energy Supply and Demand



*Note: 1 Quad is equivalent to about 500,000 barrels of oil per day for one year.

Reduced Potential for Global Warming



* Global warming potential(GWP)- Unit of 100-year global warming potential measured in billion metric tons CO2 equivalents. Greenhouse gases vary in lifetimes and ability to absorb and radiate heat, therefore a common unit is used.

National Energy Strategy

Estimated Results in 2010

- Reduces oil imports from 65 percent to between 40 percent and 45 percent.
- Reduces oil use by 3.4 million barrels per day and increases domestic oil production by 3.8 million barrels per day.
- Increases electricity produced from renewable sources by 16 percent.
- Increases use of alternative transportation fuels and technology by up to 3 million barrels per day.
- Reduces U.S. emissions of greenhouse gases at or below 1990 levels.
- Saves consumers more than $90 billion in energy costs (1989 dollars).

NATIONAL ENERGY STRATEGY: **Consumer Costs**

Everyone is an energy consumer. At home, at work and at play we depend on energy to maintain our standard of living.

The National Energy Strategy leaves energy choices up to the consumer; it does not seek to impose the judgment of the government. There are no new gasoline taxes or taxes on imported oil that drive up the cost of home heating oil.

The NES increases consumer choices by:

- Removing impediments to a more efficient marketplace
- Providing more fuels and energy technologies from which to choose
- Lowering the costs of getting energy to the consumer

Actions that reduce consumer costs:

- Rejects taxes or subsidies that jeopardize U.S. competitiveness or penalize consumers. There are no new gasoline taxes to drive up the cost of driving to work and there are no new taxes on imported oil to increase the cost of home heating oil.

- Amends the Public Utility Holding Company Act (PUHCA) to permit greater competition in the production of electricity

- Expands access to electricity transmission lines for wholesale power producers and buyers

- Streamlines site selection processes for new powerplants and transmission lines

- Provides tax-free treatment of utility efficiency rebates given to consumers as rate discounts

- Deregulates oil and natural gas pipelines where there is a competitive market
- Expedites natural gas pipeline construction
- Increases R & D on cost-effective renewable energy technologies
- Increases R & D on the development of competitively priced alternative transportation fuels and technologies

Consumer savings resulting from NES compared with expected conditions without NES (in 1989 dollars):

- Between now and the year 2010, we estimate consumers will save about $750 billion in gasoline, home heating oil and other liquid petroleum fuel expenditures
- Between the years 2000 and 2010, consumers are projected to save more than $130 billion in electricity bills
- In the year 2010, gasoline and home heating oil prices are projected to decline by almost 10 percent
- The nation could save $500 billion in total energy costs between the years 2000 and 2010

NATIONAL ENERGY STRATEGY: **Efficiency and Conservation**

The National Energy Strategy promotes energy conservation and efficiency by removing regulatory impediments to conservation, stimulating conservation in Federal programs and the private sector and developing more energy efficient technologies.

Actions to improve energy conservation and efficiency:

- Support the use of Integrated Resource Planning to increase investments in energy conservation by electric utilities

- Expand use of mortgage financing incentives for energy efficient homes and increase use of voluntary home efficiency ratings

- Set cost-effective appliance and equipment efficiency standards, and require energy efficiency labeling for light bulbs, commercial space heating, commercial space cooling, commercial ventilation, commercial water heating, commercial refrigeration, office equipment, and electric motors up to 25 horsepower

- Improve energy efficiency of public housing

- Strengthen building efficiency standards and assist states to expand their use

- Provide for tax-free treatment of utility discounts for efficiency investments by consumers

- Improve efficiency of industrial processes through increased funding for industry-government joint ventures

- Conserve fossil fuels through a renewable energy investment tax credit

- Conserve oil through alternative fuels and technology programs

- Speed private sector adoption of high efficiency technologies through aggressive transfer of these technologies to the marketplace

- Scrap older, less fuel efficient vehicles

- Increase use of van-pools, car-pools and mass transportation through increased tax-free commuter subsidies by employers

- Increase R & D on more efficient technologies for cars, trucks, trains and aircraft

- Implement Intelligent Vehicle/Highway Systems widely to reduce traffic congestion and conserve transportation fuels

Results of NES in the year 2010 compared to expected conditions without NES:

- Reduces electricity demand by an estimated 1.6 quads

- Reduces demand for transportation fuels by the equivalent of more than 1 million barrels of oil per day

- Reduces energy used in residences and commercial buildings by an estimated .4 quads

- Lessens projected industrial energy use by .8 quads

- Yields total energy savings estimated to be equal to 3.5 million barrels of oil per day

- The NES will result in a reduction of total primary energy demand by 7.5 quads in 2010 and by nearly 13 quads in 2020, and by more than 17 quads in 2030 from the current policy base case

NOTE: **A quad is roughly the same as one year's worth of oil used at the rate of 500,000 barrels per day**

NATIONAL ENERGY STRATEGY: Energy Security

The National Energy Strategy (NES) enhances our national security by reducing the total amount of oil we need and increasing the amount of oil we produce at home. The net result is reduced dependence on unreliable energy suppliers.

Actions to reduce oil consumption:

- Require use of alternative fuel vehicles in commercial fleets
- Increase federal purchase of alternative fuel vehicles
- Lift cap on CAFE incentives to builders of alternative fuel vehicles
- Accomplish comprehensive natural gas regulatory reform to allow natural gas to replace oil in stationary or transportation uses
- Increase commuter use of van-pools, car-pools and mass transportation through allowing larger tax-free commuter subsidies by employers
- Improve traffic flow through the installation of Intelligent Vehicle/Highway Systems
- Accelerate research to develop transportation fuels from biomass
- Increase R & D on electric vehicle batteries, fuel cells and low-heat-rejection diesel engines
- Develop high-speed rail technologies and implement MAGLEV initiative (magnetic levitation)
- Increase efficiency of passenger vehicles by scrapping older, low efficiency cars
- Increase R & D for high efficiency aircraft engines and fuselages

Actions to increase domestic oil production:

- Develop new technology to recover oil left behind by conventional oil production methods
- Provide access to small portions of the Arctic National Wildlife Refuge with strict environmental safeguards

- Provide access to carefully targeted portions of the Outer Continental Shelf
- Remove regulatory barriers to greater Alaska North Slope development

Results of NES in the year 2010 compared with expected conditions without the NES:

- Reduces the total amount of oil we need by as much as 3.4 million barrels a day
- Increases domestic oil production by an estimated 3.8 million barrels a day
- Shrinks oil imports by an estimated 7 million barrels a day
- Reduces the share of the nation's oil needs provided by imports from 65 percent to between 40 percent and 45 percent
- Increases domestic economically recoverable oil resources by 20 billion to 75 billion barrels
- Cuts the nation's oil import bill by an estimated $300 million per day (in 1989 dollars)
- Reduces the number of visits to U.S. coastal waters by tankers carrying foreign oil by 1,700 fewer visits per year

NATIONAL ENERGY STRATEGY: Energy and the Environment

The production and use of the energy we need to maintain our quality of life affect the environment. The NES will lessen those impacts first by reducing the overall amount of energy we need, then by reducing the environmental impacts of the energy we use and produce.

Actions that will reduce energy's environmental impacts:

- Increase R & D funding for more energy efficient vehicle technologies, including electric vehicle batteries, fuel cells, gas turbines and low-heat-rejection diesel engines
- Increase R & D for clean renewable technologies such as solar, wind, biomass and geothermal
- Develop new energy crops to produce renewable alternative transportation fuels
- Extend renewable energy investment tax credit for solar and geothermal technologies
- Achieve broad scale reform of natural gas regulations to permit clean burning natural gas to replace oil in transportation and other uses
- Require use of alternative fuel vehicles in commercial fleets
- Increase federal purchase of alternative fuel vehicles
- Expand use of HOV lanes, ridesharing and mass transit to reduce transportation energy use and emissions
- Implement Intelligent Vehicle/Highway Systems to improve traffic flow and save energy
- Develop high-speed rail technology and implement MAGLEV (magnetic levitation) initiative
- Improve energy efficiency of public housing
- Increase energy production from municipal solid waste, as part of a comprehensive solid waste management system
- Maximize production of clean hydroelectric power at existing dams through deregulation of small facilities and streamlining of licensing processes for larger generating plants
- Encourage electricity conservation by providing tax-free treatment of utility efficiency rebates given as rate discounts to consumers
- Support the use of Integrated Resource Planning to increase investments in energy conservation by electric utilities

- Maintain and enhance the nuclear power option by developing inherently safe, standardized nuclear power plants that can be built in a timely manner

- Promote use of clean coal technologies

- Expand use of mortgage financing incentives for energy efficient homes and increase voluntary use of home efficiency ratings

- Raise levels of funding for R & D on more energy efficient industrial processes to reduce energy use and waste

- Establish cost-effective appliance and equipment standards; and require energy efficiency labeling for light bulbs; office equipment; electric motors up to 25 horsepower; and commercial heating, cooling, refrigeration, water heating, and ventilation equipment

Environmental benefits:

- For the global environment, NES initiatives go beyond the Montreal Protocol and the Clean Air Amendments to keep U.S. emissions of greenhouse gases, measured by their global warming potential, at or below 1990 levels, well after the year 2000

- The NES will reinforce the objectives of the Clean Air Act Amendments of 1990 by contributing to long-term reductions in acid rain and smog

- The NES reduces solid wastes from coal processing by some 75 million tons in the year 2010, compared with expected levels without the NES

- The NES reduces oil imports by an estimated 7 million barrels a day in 2010, compared to expected import levels without NES -- this reduces the risk of oil spills in our coastal waters because it translates into 1,700 fewer visits per year by tankers carrying foreign oil

NATIONAL ENERGY STRATEGY: Summary

Energy is fundamental to our quality of life. Because of this we have developed the NES dedicated to providing the nation with secure supplies of reasonably priced energy, produced and used in environmentally responsible ways.

The NES accomplishes these goals by harnessing the strength of market forces, the common sense of the American people, the responsible leadership of the private sector and government, and the unique advantages provided by our natural and human resources.

The NES is comprehensive and balanced. It contains a wide range of legislative and administrative provisions that yield substantial results for the nation.

It rejects new taxes, fees and regulations intended to force Americans to make energy decisions regarded as "correct" by the government. Such heavy-handed federal command and control approaches only ensure higher consumer costs. They do not ensure adequate energy supplies.

Instead, the NES allows Americans to make their own energy decisions. It provides the public with more opportunities and information. It removes impediments to the efficient functioning of the market. It focuses important research and development (R & D) actions on new, emerging, cleaner, more efficient energy technologies.

This comprehensive approach is expected to benefit America in many ways.

The NES will benefit consumers by:

- Reducing consumer expenses for gasoline, home heating oil and other petroleum fuels by an estimated $750 billion (1989 dollars) between now and the year 2010, compared to costs expected without the NES

- Saving consumers a projected $126 billion (1989 dollars) in electricity expenditures between the years 2000 and 2010, compared with estimated costs without the NES

- Rejecting new energy taxes or subsidies that penalize consumers and burden the U.S. economy and our international competitiveness

The NES will enhance energy security by:

- Reducing the nation's imported oil needs by increasing the amount of domestic oil production and reducing the domestic oil demand. In the year 2010, without NES, we will import an estimated 65 percent of the oil we consume. With NES, oil imports are estimated to be no more than 40 percent to 45 percent.

- Reducing the demand for oil by some 3.4 million barrels a day and increasing domestic production by an estimated 3.8 million barrels a day by 2010, compared to estimated amounts without the NES φ

The NES increases energy efficiency by:

- Saving a projected 1.6 quads of electricity demand by 2010 compared to expected demand levels absent the NES

- Increasing electricity produced from renewable sources by 16 percent by the year 2010

- Reducing the amount of total energy consumption in 2010, compared to estimated consumption levels without NES

- The NES will result in a reduction of total primary energy demand by 7.5 quads in 2010 and by nearly 13 quads in 2020, and by more than 17 quads in 2030 from the current policy base case

The NES benefits the environment:

- For the global environment, NES initiatives go beyond the Montreal Protocol and the Clean Air Act Amendments to keep U.S. emissions of greenhouse gases, measured by their global warming potential, at or below 1990 levels, well after the year 2000

- The NES reinforces the objective of the Clean Air Act Amendments of 1990 by contributing to long term reductions in acid rain and smog

NOTE: A quad is roughly the same as one year's worth of oil used at the rate of 500,000 barrels per day

NATIONAL ENERGY STRATEGY

EXECUTIVE SUMMARY

First Edition
1991/1992

Washington, D.C.
February 1991

A NATIONAL STRATEGY

How We Expect To Produce and Use Energy in the Future

The National Energy Strategy lays the foundation for a more efficient, less vulnerable, and environmentally sustainable energy future. It defines international, commercial, regulatory, and technological policy tools that will substantially diversify U.S. sources of energy supplies and offer more flexibility and efficiency in the way energy is transformed and used. Specifically, it will spur more efficiency and competition throughout the energy sector, expand the fuel and technology choices available to the Nation, improve U.S. research and development (R&D), and support the international leadership the United States exercises in energy, economic, security, and environmental policy.

The objective of the National Energy Strategy, as established by President Bush in July 1989, is—

achieving balance among our increasing need for energy at reasonable prices, our commitment to a safer, healthier environment, our determination to maintain an economy second to none, and our goal to reduce dependence by ourselves and our friends and allies on potentially unreliable energy suppliers.

The President directed that "a keystone of this strategy" be continuing the successful policy of market reliance. Wherever possible, markets should be allowed to determine prices, quantities, and technology choices. In specific instances where markets cannot or do not work efficiently, government action should be aimed at removing or overcoming barriers to efficient market operation.

The goals of a healthy environment and reduced dependence on insecure suppliers represent national security, foreign policy, and social benefits to which markets are unlikely to give adequate weight. Hence, government must act, alone or in concert with private markets, to appropriately incorporate these considerations. However, regulations and other government interventions are extremely blunt tools that always impose unforeseen costs by reducing the flexibility of the economy. Therefore, government intervention in markets must be justified by rigorous cost-benefit analysis and rely to the maximum possible extent on economic incentives to allow the economy to achieve our energy security and environmental goals at the lowest possible cost.

This is the framework we used to evaluate the proposals for this Strategy that were submitted by people and organizations all across the country. These submissions were essential to building a National Energy Strategy that fully addresses the energy challenges and opportunities before us.

The Strategy also builds upon a number of Bush Administration initiatives. These include the following: (1) the 1990 revisions to the Clean Air Act; (2) natural gas wellhead decontrol legislation in 1989; (3) incentives provided to domestic renewable and fossil energy producers in the fiscal year 1991 budget agreement; (4) the unprecedented international consensus forged in the wake of the Persian Gulf crisis; (5) the fiscal year 1991 and 1992 realignments of the Department of Energy's research and program priorities; (6) the Administration's domestic energy supply and demand measures adopted in response to the Iraqi oil disruption; and (7) the science and mathematics education initiatives by the Secretary of Energy.

Future energy use will be more efficient because of the market-driven use of new technology and because of ongoing public and private sector efforts to promote energy efficiency (for example, State efforts to promote integrated resource planning). We estimate that under current policies,[1] the amount of energy used in the United States to create a unit of gross national product (GNP) will decrease by almost 12 percent in the year 2000 and slightly more than 20 percent in the year 2010 over today's energy-efficiency levels. This represents a savings of more than 13 quads[2] of energy in 2000 and almost 30 quads in 2010.

The challenge of the National Energy Strategy is twofold: (1) to reinforce these current policy measures to make sure that the progress we believe is probable is actually achieved; and (2) to accomplish even greater improvements in energy efficiency, in security, and in the reduction of energy environmental impacts than would be achieved by current policies alone. To meet these challenges, the Strategy calls for action by Federal, State, and local governments and by domestic and international energy producers and consumers.

This National Energy Strategy provides a roadmap to a more secure and cleaner energy future through greater energy and economic efficiency and new technology.

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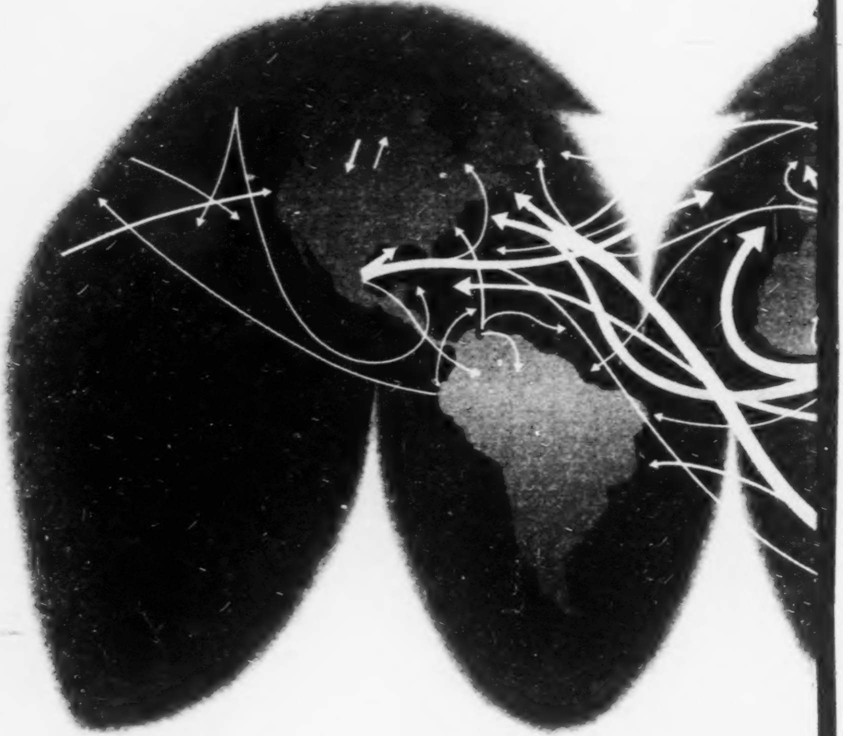
[1] The "Current Policy Base" case depicts a hypothetical energy future based on the very unlikely scenario of no change to, or a "frozen," current energy policy, including the effects of existing laws except for the Clean Air Act Amendments of 1990. Projected energy effects of these amendments are included in "With Strategy" results unless separately indicated. The purpose of this case is not to forecast, but to provide a reference, something to measure from. (A more detailed explanation of the Current Policy Base case can be found in Appendix C.)

[2] A "quad" (1 quadrillion British thermal units, or Btu) is a standard unit used in comparing large amounts of energy derived from diverse sources, or used in differing applications -- based on converting the respective total energy contents into heat equivalents. For example, 1 quad is roughly the same as 1 year's worth of oil used at the rate of 500,000 barrels per day.

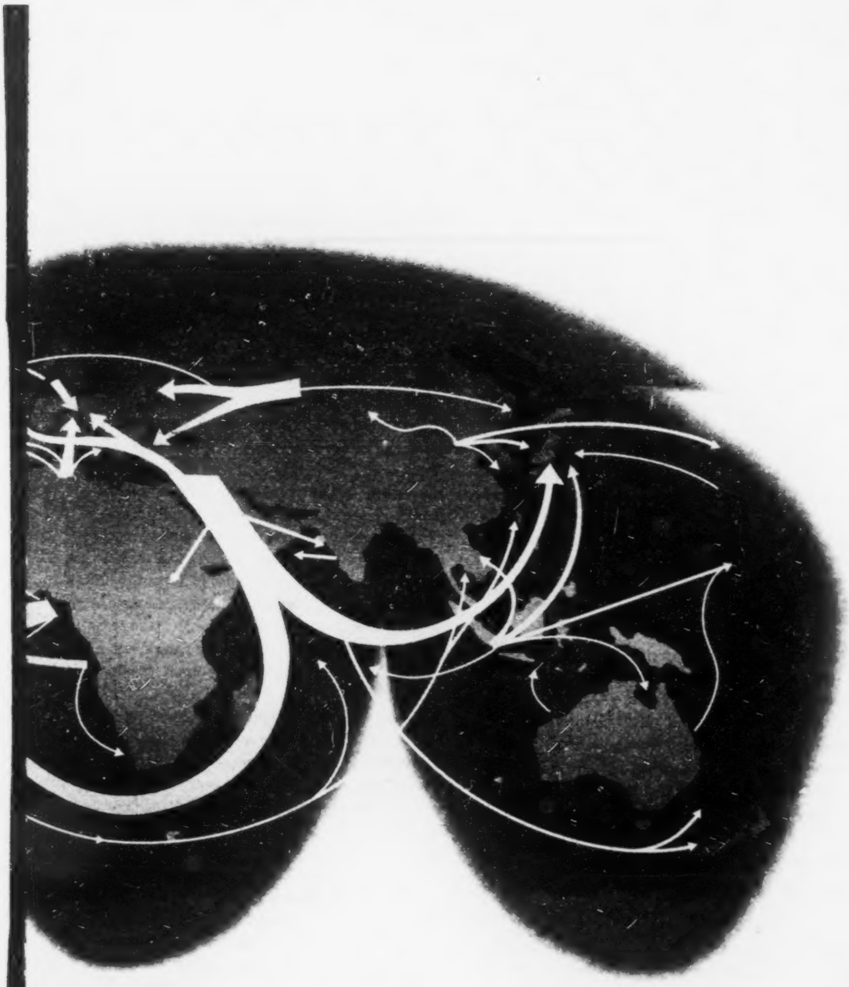
[3] British GNP growth moved from +2.4 percent prior to the shock to -2.0 percent after the shock.

World Petroleum Market

Complex and Interdependent



Source: U.S. Department of Energy



Achieving Greater Energy Security

Much of the oil on which we and the rest of the world depend is produced in politically volatile regions of the globe. The oil fields of the Persian Gulf alone provide one-fourth of the oil the world presently consumes. They contain nearly two-thirds of the world's proved oil reserves.

For nearly 20 years, U.S. Administrations have sought to balance the economic benefits of using low-priced imported oil with the foreign policy risks and the security costs of ensuring oil's free flow. These two decades have shown that *sudden*, dramatic changes in world oil prices are far more harmful to the United States and other nations than a persistent but gradual rise in price—even if the *average* price over the long term in both sets of circumstances is identical. Popular opinion aside, our vulnerability to price shocks is not determined by how much oil we import. Our vulnerability to oil price shocks is more directly linked to: (1) how oil dependent our economy is; (2) our capacity for switching to alternative fuels; (3) reserve oil stocks around the world; and (4) the spare worldwide oil production capacity that can be quickly brought on line.

The contrasting experiences of Great Britain and Japan in 1980, after the Iranian revolution triggered an increase in oil prices to more than $40 per barrel, offer a classic example of how oil imports alone are an inadequate gauge of "oil vulnerability." Great Britain was almost totally self-sufficient in oil, but it suffered economically *more* from the oil-price shock than most countries.[3] Japan, which did (and still does) import *all* the oil it uses, experienced only a slowing of its economic growth to a very respectable 3.4 percent from 5.3 percent before the shock.

In short, as Figure 1 illustrates, we are part of a complex and interdependent world oil and refined-petroleum products market. Products flow to where the demand is greatest, as reflected by the highest price. Any increase in the world price of oil, brought about by any event, in any place, would raise the price of U.S. oil and the price of oil to our allies and trading partners, regardless of the degree of our import dependence. Recognizing our energy *inter*dependence allows us to focus our efforts on those things that will enhance global energy security, and, by so doing, enhance America's security.

The National Energy Strategy review confirmed that no feasible combination of domestic or international energy policy options can make us completely invulnerable to oil supply disruptions during the foreseeable future. Indeed, it revealed that our Nation and the world are likely to depend *more* on Middle East oil suppliers under any realistic scenario for the foreseeable future. Nevertheless, if fully implemented, the National Energy Strategy *will* make our country less prone to economic damage from violent fluctuations in either the supply or the price of petroleum.

No single policy tool can substantially increase America's energy security. The basic vulnerability involves oil, but reducing this vulnerability requires a broad array of actions: maintaining adequate strategic reserves; increasing the efficiency of our entire fleet of cars, trucks, trains, planes, and buses; increasing U.S. petroleum production in an environmentally sensitive manner; further deregulation of the natural gas industry; and using alternative transportation fuels.

Since our vulnerability cannot be completely eliminated, it is not in our interest to adopt measures that reduce imports but impose high economic or environmental costs. Policy measures should be chosen that balance economic, environmental, and energy security objectives.

The National Energy Strategy aims to diversify the sources of oil supply *outside* the Persian Gulf by encouraging environmentally sensitive production in the United States (including certain areas of the Outer Continental Shelf (OCS) and the Arctic National Wildlife Refuge (ANWR)), other parts of the Western Hemisphere, Europe, and Asia and to further develop and maintain contingency mechanisms (including strategic oil reserves and stocks) and excess world production capacity.

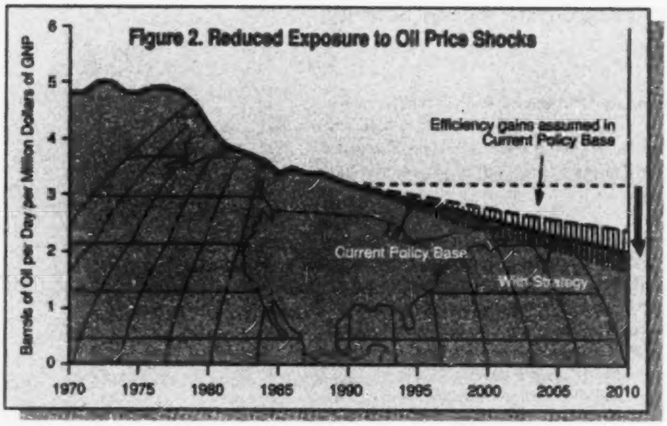


Figure 2. Reduced Exposure to Oil Price Shocks

(The vertical strokes in this and following Strategy Charts reflect the inherent uncertainty of projecting future impacts.)

Simultaneously, as Figure 2 illustrates, the National Energy Strategy would reduce the importance of oil to the U.S. economy—through conservation, efficiency improvements, and oil displacement by the use of improved technologies and alternative fuels.

National Energy Strategy initiatives are expected to decrease U.S. oil consumption by 1.3 million barrels per day below projected year-2000 levels and by 3.4 million barrels per day below projections for the year 2010—largely because of displacement of oil by alternative fuels in vehicles. As alternative fuels (compressed natural gas, electricity, and alcohol from natural gas, biomass, and coal) and the technologies to use them become more cost-competitive, they will become available across the country to a large and growing fleet of fuel-flexible and dedicated alternative-fuel vehicles and gradually erode petroleum's dominant role in the transportation sector. The effects of these initiatives on total U.S. oil consumption is shown in Figure 3.

As shown in Figure 4, the Department of Energy estimates that National Energy Strategy initiatives could increase domestic oil production by 1.8 million barrels per day above the levels projected for the year 2000—largely because of the use of advanced oil recovery technology made possible by new investments in Federal and private-sector R&D, and by environmentally responsible development of promising areas like ANWR and OCS. By 2010, domestic oil production could be augmented by 3.8 million barrels per day.

Achieving Greater Energy Security

As Figures 3 and 4 illustrate, the National Energy Strategy embodies a sustainable, *balanced* approach to increasing supply and reducing demand. This first National Energy Strategy will be adjusted over time as technologies, markets, and knowledge change.

The Strategy is not specifically targeted at the problems of the moment. With regard to the short term, the Strategy builds upon a decade of energy market deregulation that has allowed the rapid and appropriate market response to the Iraqi crisis. In addition, the Strategic Petroleum Reserve, used as part of a coordinated international response, has demonstrated its capability to effectively address shortrun oil market disruptions.

Some will suggest that this progress in enhancing our energy security is not enough, that we should embark on measures such as oil import fees; large taxes on gasoline; subsidies for the production of liquid fuels from coal, shale, and natural gas; broadly mandated use of alternative transportation fuels; and sharply higher fuel-efficiency standards that would compel the use of smaller, possibly less safe, cars. These and other similar measures were *all* carefully examined in the development of the National Energy Strategy. Oil imports could be reduced substantially, depending on the level, type, and phase-in of subsidy, taxation, or mandate. But the cost would be very high—in higher prices to American consumers, lost jobs, and less competitive U.S. industries. Moreover, as the experience of Great Britain in 1979 pointed out, these tax, subsidy, and mandate measures would *not* necessarily shield the U.S. economy from the effects of future world oil market disruptions, not even if the United States were to eliminate virtually all oil imports. The economic impacts depend more on *price*, as set by the world market, than on the level of our imports.

What does the Strategy offer instead? A balanced program of greater energy efficiency, use of alternative fuels, and the environmentally responsible development of all U.S. energy resources.

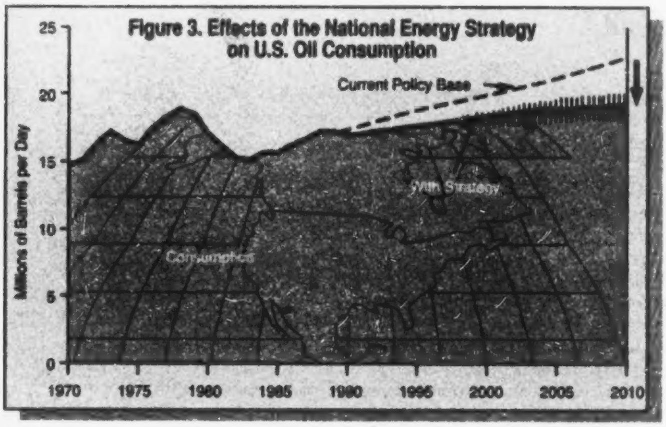


Figure 3. Effects of the National Energy Strategy on U.S. Oil Consumption

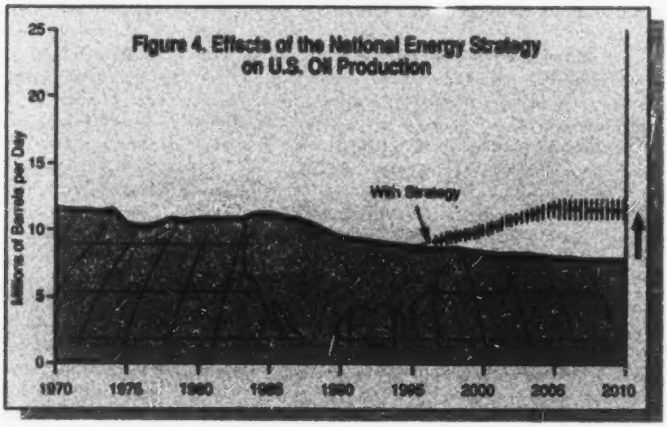


Figure 4. Effects of the National Energy Strategy on U.S. Oil Production

Increasing Energy and Economic Efficiency

This National Energy Strategy reflects a National commitment to greater efficiency in every element of energy production and use. Greater energy efficiency can reduce energy costs to consumers, enhance environmental quality, maintain and enhance our standard of living, increase our freedom and energy security, and promote a strong economy. A common feature of every new technology supported in this National Energy Strategy is its potential to more efficiently transform energy raw materials into the energy services we need. Under this heading are the National Energy Strategy initiatives designed to increase the efficiency with which we use energy, in the generation and use of electricity, in our residences and offices, in the industrial sector, and in transportation.

Increasing Efficiency in Electricity Generation and Use

The United States is becoming increasingly electrified. By 2010, we project that 41 percent of our primary energy will be consumed in electricity generation, up from 36 percent today. Accordingly, it is extremely important that we produce, distribute, and consume electricity as efficiently and as cleanly as possible.

About 700,000 megawatts (MW) of electric generating capacity is now installed in the United States. For most of this century, U.S. electricity demand has increased at roughly the same rate as GNP. Even with aggressive conservation and efficiency efforts, and assuming that the existing 700,000 MW is maintained through refurbishment and replacement, we will need about 200,000 MW *more than the present total* to meet the electricity requirements of a growing U.S. economy in 2010. The Federal-State regulatory regime that governs investment decisions in electricity supply and demand will profoundly influence the types of new capacity to be built, who will build it, what technology and fuels are used, and what the full consumer and environmental consequences will be.
These new capacity decisions are further complicated by the difficulty in finding sites for new generating and transmission facilities of *any* kind in many parts of the country. Moreover, outmoded legislation (some from half a century ago) unnecessarily prevents some of the most able builders and operators of electric powerplants from engaging in the wholesale electricity generation business.

Specifically in the electricity area, the National Energy Strategy will:

Amend the Public Utility Holding Company Act of 1935 (PUHCA). Reform would allow builders of powerplants to build, own, and operate powerplants in more than one area, while ensuring continued protection of consumer interests.

Expand Integrated Resource Planning (IRP). IRP is a process for meeting consumer electricity needs by demand reduction or supply addition, whichever is most cost-effective. The existing IRP Program at the Department of Energy will be expanded to provide more accurate and timely information and analytical tools to consumers, utilities, and State commissions. In addition, the Department will promote IRP by the Federal power marketing administrations (PMA's), and work with the Federal Energy Regulatory Commission (FERC) to foster IRP through FERC's regulation of wholesale power markets.

Provide Tax-Free Treatment of Utility Efficiency Discounts. The Internal Revenue Service will treat as exempt from Federal taxation utility bill discounts that electricity consumers receive for investments they make in energy efficiency.

Reduce Federal Subsidies for PMA Electricity. Require Federal power marketing administrations to sell power at rates that will cover Government costs. Not only will electricity conservation be enhanced, but Federal receipts will increase with minimum impact on PMA rates.

Expand Access to Electricity Transmission for Wholesale Buyers and Sellers. Existing policies and programs under the Federal Power Act will be reviewed to ensure that transmission services and facilities are adequate for the emerging competitive generation market. Expansion of transmission access and promotion of efficient pricing for these services would use existing electricity generation facilities most efficiently and provide lower electricity prices for the Nation's industries, shops, and homes.

Improve Siting of New Generating Plants and Transmission Lines. Joint efforts with State and regional authorities are necessary to develop mechanisms to promote the timely, efficient siting of electricity generation and transmission facilities without jeopardizing public participation and environmental protection.

Increasing Residential and Commercial Energy Efficiency

In residential and commercial buildings, the National Energy Strategy seeks to maintain or enhance comfort, indoor air quality, and affordability, while reducing energy use. The National Energy Strategy proposes the following actions:

Expand Research and Development. The Department of Energy is significantly expanding its support for R&D on a wide range of more energy-efficient building technologies. Working together with private industry, universities, and other organizations, the Department will continue its efforts to accelerate the development and use of such technologies.

Continue Support of State and Utility Programs. The Department of Energy and other Federal agencies will continue to provide assistance to States and utilities in their efforts to improve energy efficiency in residential and commercial buildings. These efforts include the weatherization of homes occupied by low-income households, the retrofit of institutional buildings, incentives for the purchase of energy-efficient appliances, and a wide range of consumer information programs.

Expand Use of Mortgage Financing Incentives for Residential Energy Efficiency. To encourage the more widespread use of mortgage financing for energy efficiency, the Departments of Energy and of Housing and Urban Development will increase financial and technical support to develop and encourage the voluntary acceptance of efficiency ratings and their use in home financing. After at least 5 years of support for voluntary adoption, it will be required that information on energy efficiency and information on the available mortgage financing options be provided to home buyers prior to sale.

Improve the Efficiency of Public Housing. The Department of Housing and Urban Development, with technical support from the Department of Energy, will establish energy indicators to identify public housing projects where significant savings can be achieved, develop innovative incentives for managers and tenants to use energy more efficiently, and more thoroughly monitor and evaluate the savings from significant energy-related investments.

Set Cost-Effective Appliance and Equipment Standards and Provide Information to Consumers Through a Labeling Program. The Department of Energy has established efficiency labeling and standards for 13 categories of residential appliances and for fluorescent lighting system ballasts. The Administration will support legislation to require energy-efficiency labeling for certain other types of equipment, including light bulbs.

Develop and Encourage Use of Building Efficiency Standards. The Administration will strengthen building energy-efficiency standards by providing technical assistance to State and local governments to promulgate and implement these standards. All new buildings subsidized by Federal funds or federally insured mortgages will be required to meet cost-effective energy-efficiency standards, which, at a minimum, are equivalent to the standards or codes currently recognized by major national organizations.

Improve Federal Energy Efficiency. The Administration will issue and implement an Executive order directing Federal agencies to continue and strengthen their efforts to improve the efficiency and management of energy use in Federal buildings and other facilities.

Increasing Energy and Economic Efficiency

Increasing Industrial Energy Efficiency

The National Energy Strategy seeks to improve energy efficiency and flexibility in the industrial sector, thereby reducing petroleum use and overall production costs. Industrial waste generation is targeted through support of increased waste recycling and measures to increase our ability to use wastes as feedstocks.

The National Energy Strategy proposes the following actions:

Increase Funding for Industrial Process Efficiency Research and Development. Funding for cost-shared R&D projects to improve industrial energy efficiency and productivity will be increased. These efforts will concentrate on major energy-using industries and processes.

Minimize Industrial Waste. Industrial R&D funding will be increased to sponsor cost-shared projects with industry to minimize industrial wastes. Reducing the generation of wastes and using wastes as feedstocks improve the competitiveness of industry and reduce the consumption of oil. In addition, improved energy and material efficiency reduces the cost of pollution control. Process innovations, modification of feedstocks and products, and recycling promise substantial payoffs.

Expand and Develop Energy Audits. States and utilities will be encouraged to expand or develop programs to speed up adoption and use of existing improved energy-using technologies. Many cost-effective opportunities to reduce industrial use of energy currently exist. Audits of manufacturing plants can identify opportunities to improve efficiency. Current industrial energy use audit programs are being expanded.

Examine Regulatory Policy. Federal regulatory programs will be examined in cooperation with the Environmental Protection Agency to ensure that the use of waste minimization technologies is encouraged. New legislation or modification of regulations will be proposed where needed.

Increasing Transportation Energy Efficiency

The National Energy Strategy seeks to reduce the amount of energy we use to move people and goods by improving the efficiency of *all* the vehicles on the road, and by increasing the overall efficiency of the transportation system itself.

Specifically, the National Energy Strategy will:

Expand Efforts to Develop Advanced Technologies. Advanced transportation technologies—including gas turbines, electric vehicles, fuel cells, and low-heat rejection diesel engines in the mid-term, and intelligent vehicle-highway systems, magnetic-levitation and other high-speed trains, and advanced air traffic control systems in the long-term—can save significant energy in the transportation sector.

Accelerate Scrappage of Older Cars. Older vehicles have higher emissions and, generally, lower fuel economy than new cars. This initiative will promote State and local government and private-sector programs that offer a "bounty" for older cars of a designated model year. Implementation of the Clean Air Act Amendments of 1990 will provide the opportunity to encourage State and local governments and the private sector to establish such programs.

Evaluate Corporate Average Fuel Economy (CAFE) Program. A comprehensive analysis of feasible fuel economy levels, considering safety, technology, economics, and the impacts of the new Clean Air Act Amendments and other recent regulatory requirements will be undertaken. Should these studies warrant them, changes to the current standards will be considered, including the following: providing credit trading and averaging among manufacturers; eliminating distinctions between import and domestic vehicles; revising noncompliance penalties; and establishing alternative forms of corporate average fuel economy standards (for example, standards based on vehicle size). These changes may permit cost-effective improvements in vehicle fuel economy without compromising highway safety.

Improve Consumer Information on Fuel Economy and System Efficiency. Additional efforts will be undertaken to increase the distribution of the Gas Mileage Guide, encouraging Americans to "drive smart" and adopt more energy-efficient driving and commuting habits. A year-long advertising campaign will inform the public about simple, common-sense measures that can help reduce oil use. The cooperative efforts with private foundations and educational institutions will be expanded to promote greater awareness of energy-efficiency opportunities.

Promote Mass Transit and Ride Sharing. A series of measures will be implemented to encourage increased use of carpools, vanpools, and mass transit. These measures will include the ability of employers to provide increased tax-free transit subsidies, increased availability of high-occupancy vehicle right-of-way, and improved public transportation services.

Securing Future Energy Supplies

Oil

For the foreseeable future, oil will remain a critical fuel for the United States and all other industrialized nations. In addition to the measures previously discussed that will make the U.S. economy less dependent on oil, the National Energy Strategy proposes initiatives to (1) reduce the economic consequences of disruptions in world oil markets, and (2) increase domestic oil and petroleum product supplies.

Measures To Reduce Impact of Oil Market Disruptions

Increase Oil Production in Countries Outside the Persian Gulf. Barriers to investment in petroleum development will be addressed on a priority basis, thereby increasing and diversifying world production capacity.

Improve Emergency Preparedness. Expand the Strategic Petroleum Reserve (SPR) to 1 billion barrels, and test Gulf Coast refined-product reserves.

Diversify Transportation Fuels. To reduce the dependence of the transportation sector on oil, the Strategy will (1) remove the limit on CAFE credits that can be earned by manufacturing vehicles capable of operating on alternative fuels, (2) accelerate the purchase of alternative-fuel vehicles for the Federal fleet, and (3) require the use of alternative fuels in car, truck, and bus fleets. These measures will complement aggressive R&D efforts to improve the technologies for the production and use of alternative fuels.

Measures To Increase Domestic Production

Open Access to Environmentally Responsible Development of the Coastal Plain of the Arctic National Wildlife Refuge and to Certain Offshore Areas. ANWR and offshore areas are potentially major sources of domestic oil and gas production, both now and for the future.

Facilitate Environmentally Responsible Development of New Alaskan North Slope Resources. Five major discovered fields on the Alaskan North Slope are undeveloped. These fields could add an estimated 1 billion barrels of recoverable oil and condensate to domestic oil production over the next several decades.

Lease Elk Hills Reserve. Operation of the producing Elk Hills Reserve field by market-driven private companies will lead to increased oil and natural gas production at lower costs.

Deregulate Oil Pipelines. Eliminating oil pipeline regulation, except for pipelines not subject to competition, will reduce consumer costs and encourage the most efficient use of the oil pipeline system.

Implement Oil and Gas Tax Incentives. The oil and natural gas tax measures enacted in 1990 as part of the budget reconciliation legislation[4] will raise production by about 400,000 barrels per day oil equivalent by the year 2000.

Promote Horizontal Well Drilling. Increased levels of domestic production will be encouraged by removing State regulatory barriers to horizontal drilling and by facilitating transfer of horizontal drilling technology.

Increase Production of California Heavy Oil. Lack of demand in the United States for California heavy oil and the existing prohibition against export of this oil are inhibiting California heavy oil production. Access to export markets would increase California heavy oil production, further diversifying world oil production and providing capital for investment in additional domestic production.

Evaluate Effects of Environmental Regulations on Domestic Refining Capacity. The Department of Energy has commissioned the National Petroleum Council to conduct a two-phase study. The first phase will produce a report by June 1991 that will address the capabilities of the U.S. refining industry to meet consumer needs, considering especially the requirements of the Clean Air Act Amendments of 1990. The second phase, to be completed in 1992, will provide analysis of the time and investments necessary to meet new environmental regulations, and their effects on petroleum product supply and prices.

Natural Gas

Natural gas is a domestically abundant source of clean energy. All price controls on natural gas at the wellhead will be eliminated by January 1993, under the Wellhead Decontrol Act of 1989. The natural gas industry, however, continues to be hampered by inefficient and outmoded regulation. This regulation, initially designed to protect the consumer, frequently has the opposite impact.

The National Energy Strategy will remove regulation, except where necessary to protect consumers, while enabling all segments of the industry to expand by taking advantage of market opportunities. If fully implemented, the National Energy Strategy measures would increase U.S. consumption of natural gas by almost 1 trillion cubic feet (approximately 5 percent) over what it would have been in the year 2000 under pre-Strategy policies.

Specifically, the National Energy Strategy will:

Expedite Gas Pipeline Construction. New natural gas pipelines could be built under several options, including shortening or eliminating the process for obtaining a certificate of public convenience and necessity from FERC. Pipelines constructed under this approach would still have to comply with all applicable State and Federal environmental laws, but would not be subjected to delay by competitors.

Streamline the National Environmental Policy Act Process Associated With Natural Gas Pipeline Construction. FERC would be the sole agency responsible for administering National Environmental Policy Act (NEPA) environmental reviews of proposals to build new natural gas pipelines. FERC would still be required to consult and solicit comments from other agencies, but other agencies would not be allowed to delay the approval process by failing to meet deadlines or by preparing independent NEPA documents.

Deregulate Pipeline Sales Rates. Unless a pipeline is found to have market power in the sale of natural gas, the price at which a pipeline sells natural gas would be deregulated if the pipeline provides comparable transportation and other services to all customers, regardless of whether they are purchasing gas from the pipeline or from other sources.

Reform Natural Gas Pipeline Rate Design. The traditional pricing structure for pipeline services would be reformed to ensure that existing pipeline and storage facilities are operated efficiently. Rate reform initiatives would include exempting natural gas pipelines from rate regulation except for pipelines found to have market power in their transportation function, promoting incentive regulation for pipelines found to have market power in their transportation functions, authorizing capacity holders to resell capacity rights, and allowing greater pricing and contracting flexibility for new pipelines.

Improve Access to Natural Gas Pipeline Transportation Services. Remaining impediments to third-party use of pipeline facilities on an open-access basis would be removed by promoting the use of pricing mechanisms rather than government rules to balance supply and demand. Efficient pricing would be facilitated by unbundling transportation, marketing, gas purchasing, and storage services. Transportation services should be offered to those purchasing gas from other suppliers comparable to those provided by the pipeline when it is the seller of gas.

Eliminate the Department of Energy's Import and Export Regulation. The Department of Energy would end its regulatory oversight of natural gas import and export transactions.

Encourage the Use of Natural Gas as an Alternative Transportation Fuel. Through accelerated purchases of alternative-fuel vehicles for the Federal fleet and through a nationwide private-fleet alternative-fuel program, the National Energy Strategy will expand market opportunities for natural gas as a transportation fuel.

4 The measures are a tax credit for enhanced oil recovery, a 2-year extension of the section 29 credit, modifications to the percentage depletion rules, and alternative minimum tax relief for independent producers.

Securing Future Energy Supplies

Coal

If we as a nation are to benefit in the future from our enormous, low-cost coal reserves, a variety of efforts are necessary to (1) develop and demonstrate new "clean coal" technologies; (2) reduce uncertainty over environmental regulation and allow electric powerplants (which use more than four-fifths of all the coal consumed in the United States) maximum flexibility in their actions to comply with the Clean Air Act Amendments of 1990; (3) provide regulatory incentives to offset financial risks in commercial deployment of new clean coal technology; (4) reduce the cost, investment risks, and environmental impacts of producing liquid fuels from coal; and (5) confront head-on the need to reduce carbon dioxide emissions associated with the use of coal.

New clean coal technologies can substantially improve efficiency and reduce emissions from powerplants. Until they are proven at commercial scale, however, their use entails more risk for utilities than conventional technologies. This additional risk could make it difficult for these new technologies to enter the marketplace quickly, especially given the tight deadlines of the Clean Air Act Amendments of 1990. The Clean Coal Technology Program, the single largest technology development program in the Department of Energy, is designed to help overcome this risk by offering the Federal Government as a financial partner in demonstrating worthy projects.

By promoting the export of clean coal technologies, the National Energy Strategy will also help other nations (especially in Eastern Europe and the developing world) to achieve common goals: a cleaner environment and less dependence on oil.

Specifically, the National Energy Strategy will:

Accelerate Use of Clean Coal Technology. The Administration will encourage State regulatory authorities to act in concert with appropriate Federal agencies and provide regulatory incentives for utilities to invest in projects using innovative clean coal technologies. The object of the regulatory incentives would be to offset the additional risks associated with investment in technologies that are not fully proven on a commercial scale.

Clarify Applicability of the Clean Air Act's Prevention of Significant Deterioration (PSD) and "New Source Review" Provisions to Existing Powerplants. Current PSD and new-source-review policy discourages certain types of maintenance, repair, and fuel-switching activities by deeming these actions to be "modifications," thus subjecting an existing powerplant that undertakes such an activity to stringent "new source" and PSD requirements. This policy will be altered by Environmental Protection Agency administrative action (and, if necessary, by new legislation) to clarify what changes in plant equipment or operation should trigger PSD and new source review.

Create Favorable Export Climate for U.S. Coal and Coal Technology. To improve the climate for coal-related exports, the National Energy Strategy will improve the visibility of U.S. firms and their products by establishing an information clearinghouse and closer liaison with U.S. representatives in other countries. Interagency coordination of Federal programs pertinent to these exports will be strengthened. Current programs and policies for facilitating the financing of coal-related projects abroad will be reviewed and improved.

Remove Barriers to Construction of Coal Slurry Pipelines. Coal slurry pipelines, using a mixture of water and coal, can compete effectively with railroads and barges as a low-cost way to transport coal, but proposed pipelines must obtain rights-of-way to cross competing railroad lines. They also raise water use concerns in areas where water is scarce. The Administration supports legislation to grant Federal eminent domain to applicants that have satisfied regional and State water use concerns.

Nuclear Power

Nuclear power can cleanly and safely meet a substantial portion of the additional base-load electricity generating capacity the United States will require by 2030 if (1) the operating lifetimes of existing nuclear plants are extended (where this can be done safely with appropriate Federal oversight and technical support), and (2) utility executives once again consider the "nuclear option" technically, politically, and economically feasible when new capacity is planned.

The State-Federal impasse on construction of a high-level nuclear waste repository, an impossibly cumbersome nuclear licensing process, and the loss of full public confidence in our ability to manage civilian nuclear power technology have all contributed to the hiatus in the construction of new nuclear capacity. The National Energy Strategy proposes a number of measures to address these issues that would, if implemented, increase nuclear power generation in 2010 by almost 10 percent and in 2020 by more than double that in the Current Policy Base case projection.

Specifically, the National Energy Strategy will:

Reform the Nuclear Power Licensing Process. The licensing process for new nuclear powerplants must be reformed by legislation to provide for early resolution of technical and institutional issues such as emergency planning prior to construction. The duration of and uncertainty associated with the postconstruction hearing must be reduced while improving the public's opportunity to address valid safety questions during the licensing process. The Administration also supports renewing the licenses of existing nuclear plants, where this can be done safely.

Properly Manage and Dispose of High-Level Nuclear Waste. All Federal agencies must fully support the Department of Energy's efforts under current law to site and license a permanent waste repository and a monitored retrievable storage facility. Federal agencies also must assist the Nuclear Waste Negotiator's efforts to identify potential hosts for these facilities. In addition, Federal legislation should be enacted that, while preserving existing due-process and regulatory requirements, will ensure that the Nation's need for facilities to isolate high-level waste is met in a timely manner. Finally, the Department of Energy will consider alternatives to current Federal management of the high-level radioactive waste program, including management by a federally chartered, independent corporation.

Develop New, Passively Safe Designs. The Department of Energy is working toward Nuclear Regulatory Commission certification for two "next generation" light-water reactors (with simplified designs and better engineered safety systems) and two more advanced light-water reactors (incorporating the concept of "passive safety") by 1995. The Department also will continue R&D on other advanced nuclear systems that show promise.

Standard reactor designs, combined with licensing reform and improved construction management, could reduce the cost of nuclear-generated electricity by as much as one-third. *Without* successful implementation of the Strategy initiatives, the contribution of nuclear power to our electricity supply could decline substantially after 2010. *With* the Strategy initiatives, nuclear power could be generating, safely and cleanly, as much as 21 percent of our total electricity needs by the year 2030.

Securing Future Energy Supplies

Renewable Resources

Public comment received during development of the National Energy Strategy revealed virtually unanimous support for the development and use of renewable energy resources because of their environmental and energy security advantages. As a result of this overwhelming interest and support, extensive analytical efforts have been made to better understand the potential of each renewable energy resource and the barriers—technological, marketplace, or otherwise—that might block renewable energy resources from achieving their full potential.

This analysis leads to several important conclusions. First of all, renewables can play a larger role in meeting our energy needs. The fraction of our energy supplied by renewables has been increasing, and that increase is projected to continue. Second, we can accelerate the growth in renewable supplies over the next 40 years without resorting to permanent subsidies or mandates. This is because several renewable technologies are on the verge of successful commercialization into the mainstream energy marketplace. These technologies have experienced significant technical progress over the past 10 years. Their commercialization does not require scientific breakthroughs. What is needed is the opportunity to translate R&D progress to practice, removal of market barriers to renewables, and continued, *focused* R&D to realize the full potential of these technologies.

Adding renewable technologies to the menu of available energy choices can contribute to a growing economy—domestically, by spurring competition and innovation, and internationally, by contributing to the balance of trade through the export of new products and technologies. Renewable technologies represent an important opportunity, but not a panacea for the U.S. energy economy. Their long-term contribution is predicated on overcoming remaining technical and cost barriers, mainly through intensified R&D.

The National Energy Strategy's renewable energy initiatives are based on these conclusions and on a clear understanding of the contributions that renewable energy can and cannot be expected to make. For example, given policies to address existing regulatory barriers and market imperfections, solar thermal or photovoltaic electricity technologies can compete today to provide electricity generation in remote locations and for peaking purposes. In addition, wind, geothermal, and biomass energy systems already can make limited contributions to meeting base and intermediate electrical loads. However, additional technical progress is needed to reduce the costs and enhance the competitiveness of renewable electric options, particularly for base-load applications.

Finally, the National Energy Strategy is based on the premise that for renewables, as for other emerging technologies, investment in R&D to increase technology performance and reduce costs is a more appropriate role for the Federal Government than is using taxes or regulations to subsidize or mandate the use of particular technologies.

Specifically, the National Energy Strategy will support renewable energy electricity and transportation fuel technologies through eight measures:

Electricity

Extend Investment Tax Credits for Emerging Renewable Technologies. The investment tax credit for renewable energy technologies will be extended through 1992.

Amend PURPA To Extend Benefits to Larger Renewable Facilities. The Public Utility Regulatory Policies Act of 1978 (PURPA) should be amended to remove permanently the qualifying size limit imposed on small power producers, but only in States that use competitive procurement programs for new electricity generating facilities.

Expand Efforts to Develop Advanced Renewable Technologies. R&D programs for renewable energy technologies will be expanded in partnership with industry, utilities, and States to improve performance and lower costs.

Amend PURPA To Allow More Flexibility in Renewable Plant Design. In addition to legislative removal of the size cap, PURPA should be amended to ease its restrictions on the percentage mix of renewable resources and other fuels qualifying small power producers are allowed to use, but only in States that use competitive procurement programs for new electricity generating facilities.

Reform Hydropower Regulation. FERC should be designated as the sole decisionmaking agency for non-Federal projects at existing dams while ensuring the disciplined, nonduplicative participation of State and other Federal agencies. FERC should not regulate small hydro projects (up to 5 MW). These actions are intended primarily to replace outdated equipment, facilitate relicensing, and promote construction of additional capacity at *existing* hydroelectric facilities.

Convert Municipal Solid Waste to Energy. The Department of Energy will work with the Environmental Protection Agency, States, local jurisdictions, and industry to collect and disseminate information and to conduct research on technologies to integrate waste-to-energy systems into comprehensive waste management programs.

These measures would increase renewable electricity generation in the year 2000 by 14 percent, and in 2010, by 16 percent as compared with the Current Policy Base case projections.

Securing Future Energy Supplies

Transportation Fuels

Support Ethanol and ETBE. The ethanol and ethyl tertiary butyl ether (ETBE) tax credits passed in 1990 as part of the budget reconciliation legislation will support the use of ethanol and the ethanol-based additive ETBE as transportation fuel components over the next decade.

Develop New Energy Crops. An accelerated program carried out by the Departments of Energy and Agriculture will aim to develop "energy crops"—nonfood feedstocks for liquid fuels—and the technology to use these feedstocks to produce cost-competitive transportation fuels by the year 2000.

Develop and Use Cost-Competitive Alternative Fuels and Technologies. The National Energy Strategy alternative fuel initiatives will provide greater incentives for manufacturers to produce alternative-fuel vehicles and use them in Federal and private fleets. Combined with provisions in the Clean Air Act Amendments of 1990, the Strategy will provide significant new market opportunities for renewable alternative fuels and electric vehicles.

Fusion Energy

For the longer term, the National Energy Strategy looks to fusion energy as an important source of electricity-generating capacity. The Department of Energy will continue to pursue safe and environmentally sound approaches to fusion energy, pursuing both the magnetic confinement and the inertial confinement concepts for the foreseeable future. International collaboration will become an even more important element of the magnetic fusion energy program and will be incorporated into the inertial fusion energy program to the fullest practical extent. The current National Energy Strategy goal is to have an operating demonstration plant (using either technique) by about 2025 and an operating commercial powerplant by 2040.

Enhanced Research and Development for Energy Security

Any meaningful effort to ensure future energy supplies must address the role of advanced technology. The National Energy Strategy deems three areas of technology development particularly vital:

- Technologies to reduce the transportation sector's near-total reliance on oil, by making oil use more efficient, by introducing alternative fuels and technology, or by diversifying travel modes;

- Technologies that increase the environmentally protective production of domestic energy resources; and

- Technologies that improve energy efficiency and increase the range of economical, clean technology choices.

A major element of the National Energy Strategy will be increased investment in advanced energy technology R&D. The fiscal year 1992 budget includes $903 million, an increase of $227 million, or 34 percent above the fiscal year 1991 budget, to support the Strategy's R&D initiatives governmentwide. The budget proposes $653 million for Department of Energy National Energy Strategy-related R&D, an increase of $134 million, or 26 percent. Over the 5-year period 1992 through 1996, the Department of Energy would invest $3.5 billion in National Energy Strategy R&D initiatives discussed in this section. This initiative looks to a future where alternative technologies are available to reduce energy consumption and increase fuel-flexibility.

To ensure that the R&D efforts pursue useful goals and result in ultimate commercialization of the technologies, the National Energy Strategy R&D initiatives will utilize industry cost-sharing and will be carried out as joint government-industry programs in which industry participants have a significant say in the nature, organization, and locus of research efforts.

A brief description of the major initiatives follows:

Advanced Transportation Fuels From Biomass. Accelerate research, development, and demonstration of new feedstocks and conversion technologies to provide initial commercialization of cost-competitive alcohol fuels by the year 2000.

Vehicle Propulsion Technologies. Enhance R&D on gas turbine engines, low-heat-rejection diesel engines for use in heavy-duty trucks, and on fuel-cell vehicles to produce cost-effective alternatives over the long term.

Electric Vehicle Technology. Expand R&D on batteries and electric vehicles, in conjunction with an industry-led consortium that has just been formed.

Aeronautical Technologies. Enhance long-term R&D on new, more energy-efficient aircraft technologies.

High-Speed Rail and Magnetic Levitation. The Department of Transportation, the Department of Energy, and the Corps of Engineers will pursue high-speed rail technologies and the National Maglev Initiative, to explore alternatives for both long-distance automobile travel and short-haul air travel.

Intelligent Vehicle-Highway Systems (IVHS). The Department of Transportation, a number of States, and the auto industry will work cooperatively to advance IVHS technology in the United States. IVHS has the potential to reduce congestion, improve traffic flow, reduce idling at traffic signals, and allow drivers to choose more efficient routes to their destinations, all of which can improve the energy efficiency of transportation.

Telecommuting. R&D on faster, easier-to-use computer networks and software can help make telecommuting more widespread.

Air Traffic Control Systems. The Federal Aviation Administration's Air Traffic Control System can enhance its efficiency and performance, with a significant impact on fuel use.

Advanced Oil Recovery Technologies. Enhance R&D on technologies that will permit greater production of the two-thirds of known U.S. oil reserves not normally recovered using present production techniques.

Industrial Technologies. Accelerate R&D for improved industrial processes and equipment and for alternative fuels and feedstocks.

Advanced Light-Water Nuclear Reactors. Advanced light-water nuclear reactors will incorporate major advances in design, including passive safety features. The Department of Energy is currently supporting first-of-a-kind engineering work that will assist companies in their efforts to have the Nuclear Regulatory Commission certify the new standardized designs.

Advanced Nuclear Reactor Concepts. Advanced nuclear reactor concepts will have safety features that go beyond the standardized designs currently envisioned. Researchers have demonstrated that both high-temperature gas-cooled reactors and liquid-metal reactors can shut themselves down safely under conditions that would be extremely serious for present-day reactors. The Department of Energy continues R&D support for both of these advanced concepts.

In addition to these specific initiatives, a national awards program will be created, offering large cash prizes for major innovations in energy technologies that can reduce U.S. oil vulnerability. The program will set forth specific energy-related technological challenges and award prizes for meeting those challenges.

By 2030, these R&D initiatives could save between 5 million and 8 million barrels per day of oil, depending on the success of the proposed R&D programs. They will improve U.S. competitiveness in world markets and help make this Nation a cleaner, safer, more desirable place than ever in which to live and work.

Enhancing Environmental Quality

Concern for the environment runs throughout the National Energy Strategy and is reflected in all the initiatives previously discussed. Reasonable and sustainable energy policies will benefit both the environment and the economy. The keys are advanced technology and improved energy use practices that can help us maintain adequate supplies of affordable energy while enhancing the quality of our environment.

Motivating our technology and resource choices must be an improved understanding of total fuel-cycle costs of all energy sources. Total fuel cycle costs are the entire costs of producing, transporting, dispensing, and using a given energy resource, including the costs of health and environment impacts. Existing analytical tools are not capable of doing this with any reasonable precision; however, developing and sharing the capability to make such total fuel-cycle cost assessments is a National Energy Strategy priority. Building on what we know now, the National Energy Strategy proposes action that will improve public health; enhance the quality of our air, water, and land; and protect the global environment.

Energy and the Quality of Our Air, Water, and Land

In air quality, the National Energy Strategy seeks to reduce energy-related emissions to achieve and maintain the National Ambient Air Quality Standards for carbon monoxide and ozone; to develop cost-effective, flexible control strategies to reduce energy-related emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x); and to ensure that other air-quality concerns are incorporated into policies for energy supply and use.

In waste management, the National Energy Strategy seeks to develop technologies, procedures, and safeguards to ensure that wastes are treated, stored, and disposed of in a manner that protects human health and the environment. The Strategy supports efforts to develop cost-effective, environmentally sound techniques to reduce the quantity, persistence, and toxicity of energy-related and other industrial wastes.

In water and land use, the National Energy Strategy seeks to ensure that activities associated with energy production and use protect surface-water and groundwater resources. Improved procedures to incorporate environmental concerns into energy facility siting and land use will also be developed and implemented.

The 1990 Clean Air Act Amendments, which are an integral component of the National Energy Strategy, will limit the major air pollutants from powerplants, vehicles, and industry. In many cases, pollutants will be reduced from current levels—despite economic growth and increased use of energy.

As Figures 5 and 6 illustrate for air emissions, National Energy Strategy initiatives (coupled with existing Department of Energy R&D programs—such as the development of alternative fuels for transportation, clean coal technologies, and

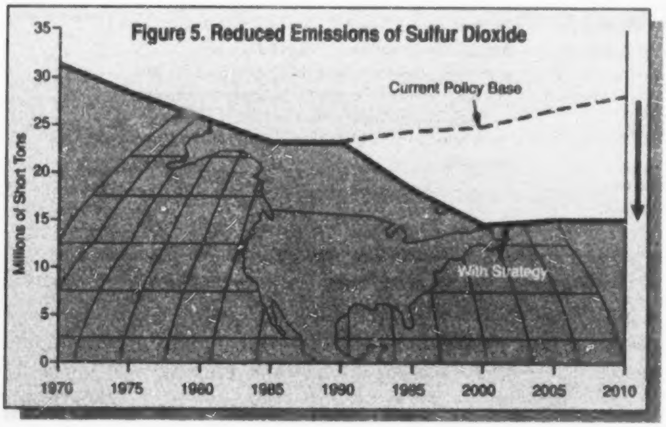


Figure 5. Reduced Emissions of Sulfur Dioxide

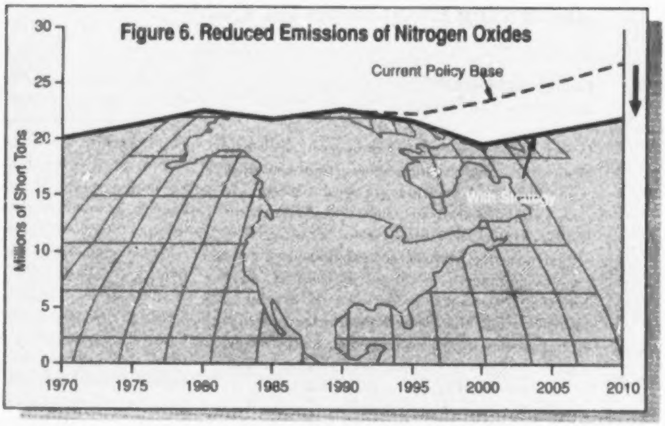


Figure 6. Reduced Emissions of Nitrogen Oxides

improvements in energy efficiency) should reduce air and water pollutants and waste even further from projected levels. For example, while advanced propulsion technologies will significantly increase efficiency, they should also reduce vehicle pollutant emissions by as much as 90 percent. National Energy Strategy measures are expected to reduce emissions of SO_2 by 12 million tons and NO_x by 5 million tons in the year 2010.

The Clean Air Act Amendments of 1990 and the National Energy Strategy are estimated to reduce SO_2 emissions by 40 percent, NO_x by 25 percent, and volatile organic compound emissions by 30 percent from the projected levels of emissions in 2030, based on policies that were in place prior to 1990. In addition, the National Energy Strategy includes a pledge to develop new technologies that minimize wastes. It also recognizes that current inefficiencies in the way wastes are regulated contribute to the problem and should be eliminated.

The National Energy Strategy proposes the following actions to better harmonize energy and environmental objectives and protect our air, land, and water:

Use Market Mechanisms. Make maximum use of market-based mechanisms (informed by full fuel-cycle cost analyses) to most effectively protect the environment, minimize costs, and provide the flexibility necessary to maintain ample energy supplies.

Increase Efficiency. Increase efficiency in every phase of energy production, transformation, and use.

Increase the Use of Natural Gas. Increase the availability and use of natural gas.

Develop Cost-Competitive Renewable Energy Supplies. Increase R&D and investment incentives for renewable energy technologies.

Develop and Use Alternative Transportation Fuels. Develop and promote the use of cleaner transportation fuels, including reformulated gasoline.

Develop and Use Clean Coal Technologies. Develop and facilitate the use of clean coal technologies.

Improve Energy Impact Assessments. Improve analyses of the effects of environmental regulation on energy supply and demand.
Improve Siting Processes. Drawing upon State model programs, improve the processes used to site energy facilities, including refineries.

Minimize Wastes. Develop cost-effective, environmentally sensitive techniques to reduce energy-related and other industrial wastes and improve environmental restoration.

One goal of these measures is to protect and enhance environmental quality while minimizing the projected costs of environmental regulation in this country (now more than $100 billion per year and growing) through more efficient management of environmental compliance.

Enhancing Environmental Quality

Energy and Global Environmental Issues

Despite large uncertainties regarding potential climate change, there is sufficient credible scientific concern to start acting to curb the buildup of so-called greenhouse gases—several of which are related to the production and use of energy. These gases include carbon dioxide, carbon monoxide, methane, and chlorofluorocarbons. Figure 7 illustrates the greenhouse gas emission reductions that would be produced by the National Energy Strategy. These reductions are achieved by: (1) greater use of renewable energy and nuclear power and improved energy efficiency in both the electricity and the transportation sectors; and (2) other actions already taken by the United States (for example, the Clean Air Act Amendments of 1990). With all of these initiatives, the United States' contribution to potential global warming would, in the National Energy Strategy scenario, remain at or below present levels for the foreseeable future. While the accuracy of any future projections diminishes as the time horizon under consideration lengthens, the National Energy Strategy will significantly reduce greenhouse gas emissions relative to any current policy baseline.

The National Energy Strategy actions are consistent with the recommendations of the United Nations' Intergovernmental Panel on Climate Change. Under its precepts, this country has taken a lead in adopting prudent strategies to reduce greenhouse gases that are also justified on grounds other than climate change (for example, reforestation, greater energy efficiency, and reducing the emission of chlorofluorocarbons and other substances that deplete the Earth's protective ozone layer).

Taken together, these actions both reduce emissions from the sources of greenhouse gases and enhance sinks (for example, trees) that absorb gases. Considering both sources and sinks of all greenhouse gases allows for a comprehensive approach to the climate change issue, including scientific and economic research, monitoring, technology development, and action plan development.

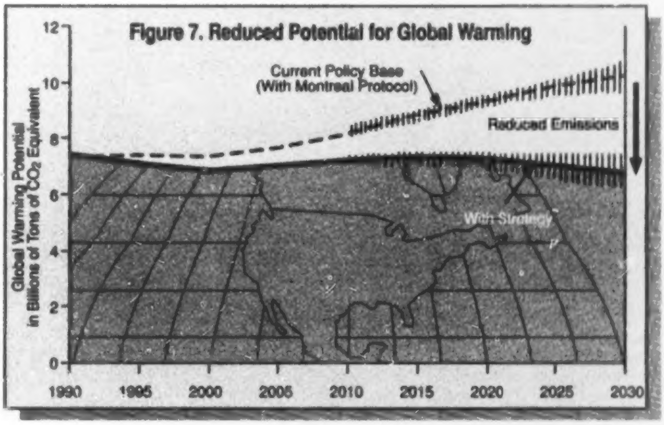


Figure 7. Reduced Potential for Global Warming

Note: Global Warming Potential (GWP)—Unit of 100-year global warming potential measured in billion metric tons of CO_2 equivalents. Greenhouse gases vary in their atmospheric lifetimes and in their ability to absorb and reradiate heat. This chart is based on converting the projected volumes of greenhouse gases to one common measure, Global Warming Potential. If indirect gases that form tropospheric ozone (nitrogen oxides and volatile organic compounds) were to be included, a slightly lower GWP for the National Energy Strategy scenario would result.

Fortifying Foundations

Fundamental Science and Engineering Research

The key to new knowledge and innovation in energy is basic science and research. Of course, there must also be *focused* R&D—both to advance new technologies and to better understand existing technologies.

A major part of the National Energy Strategy is to expose and expand the role that science and technology can play in achieving U.S. objectives for energy security, economic growth, and enhanced environmental quality. History is full of instances where technology revolutionized both our energy sources and our effectiveness in putting them to human service. New insights about geology, new extraction techniques, and the exploration of new geographical frontiers more than once have "restocked" domestic petroleum reserves, notwithstanding declarations that those reserves were about to be exhausted. During the 1980's, new technology helped to break the one-to-one relationship that had long existed between total primary energy consumption and economic growth.

The private sector is primarily responsible for developing and-commercializing technology, but the Federal Government has a critical role in basic and applied scientific research. The extensive system of national research laboratories and Federal support of academic and private research can profoundly influence the focus, scope, and pace of energy technology development.

Accordingly, the National Energy Strategy seeks to maintain U.S. preeminence in fundamental science and engineering research, sharpen the focus of Strategy-related research in energy science and technology, and promote excellence and productivity throughout the U.S. research establishment. The following areas are particularly important:

Maintain Basic Research Portfolio. Maintain a balanced and diverse Federal portfolio of research investments in fundamental science and engineering research, estimated to be in excess of $11 billion annually across 10 Federal agencies.

Establish Federal Research and Development Priorities. Establish a continuing interagency review of energy-related applied Federal R&D, estimated to be approximately $3 billion in annual investments across seven Federal agencies, to identify top-priority technical opportunities and ensure that research investments support key Strategy goals and technical objectives.

Encourage Industrial Research. Encourage industry to increase its energy research investments through financial incentives for research consortia, permanent tax credits for research and experimentation investments, increased use of personnel exchanges, and prizes and awards.

Strengthen University Research. Strengthen individual investigator capabilities, increase cost sharing in funding proposals, and upgrade university equipment and instrumentation.

Maintain User Facilities. Ensure the viability of top-priority, world-class research facilities that are available to university and private investigators, and explore alternative means for supporting them in the longer term.

International Collaboration. Pursue bilateral and multilateral international agreements to construct and operate high-cost, long-term experimental research facilities.

Fortifying Foundations

Technology Transfer

In the area of technology transfer, the National Energy Strategy seeks to: (1) increase the use of joint industry-government efforts in R&D and in the commercialization of new technologies; (2) increase the participation of the Federal Government in the technology transfer process; and (3) accelerate the process of transferring technology to private industry and commerce in order to enhance U.S. competitiveness.

The National Energy Strategy proposes the following actions:

Increase Industry Participation. Increase industry participation in R&D and in the commercialization of new technologies by making the 20-percent tax credit for industrial research and experimentation permanent and by encouraging collaborative, cost-shared R&D.

Ensure Adequate Protection for Intellectual Property. Provide copyright protection for technical data and software, both at home and abroad. Broaden the National Cooperative Research Act of 1984 to include certain types of product development activities, and reform product liability laws. Revise classification policies to improve industrial access to laboratories and facilities that could contribute to enhancing U.S. competitiveness, while continuing to protect national security interests. Finally, revise Federal procurement regulations and practices to promote greater efficiency and innovation.

Promote Technology Exports. Improve the coordination of Federal agencies in export promotion efforts, particularly for Eastern Europe and developing countries.

Increase the Participation of the Federal Government in Technology Transfer. Develop and implement comprehensive agency policies supporting technology transfer as a fundamental mission of the Federal Government. Provide adequate funding for technology transfer, including support for cost-shared programs that help demonstrate the technical feasibility of generic, enabling technologies and that provide technical assistance for the development of spinoff applications by industry.

Accelerate the Technology Transfer Process. Improve the delivery of technology transfer services nationwide through careful reform of the infrastructure. Ensure that Federal approval for procurement and technology transfer activities are sufficiently speedy and flexible.

Education:
Investing in Human Resources

Without a population literate in math and science, we cannot expect to develop, manage, or properly use the new energy technologies we will need to provide a secure, clean energy future for all Americans. It is for these reasons that the National Energy Strategy contains key recommendations for improving math, science, technology, and engineering education. The Federal role—a modest but critical 6 percent of total funding at the precollege level—must be integrated with those of the States and the private sector to achieve the best results. Special emphasis must be placed on recruiting women and underrepresented minorities into the technical work force, to recruiting and preparing qualified math and science teachers for our schools, and to broadening the base of "science literacy" among the U.S. public.

The President and the Governors provided a framework for achieving excellence in U.S. education following the Charlottesville Education Summit. This part of our "national strategy" has already been well publicized, and it includes the goal that "by the year 2000, U.S. students will be first in the world in science and mathematics achievement."

The Secretary of Energy chairs the Committee on Education and Human Resources of the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET-CEHR). This 16-agency group prepared the first coordinated report and budget for direct Federal spending on math, science, and engineering education, which accompanied the President's fiscal year 1992 budget submission to Congress.

The National Energy Strategy seeks to increase Americans' understanding of the role of energy in their lives, and its attendant costs and benefits, and to ensure a reliable supply of highly skilled scientists, engineers, and technicians in energy-related fields. The National Energy Strategy emphasizes the need to:

- Improve precollege mathematics and science education in support of the National Education Goals.

- Encourage precollege reform through government agencies and school partnerships.

- Strengthen and update the math and science curriculum.

- Promote positive images of mathematics and the sciences.

- Initiate and expand incentives for careers as mathematics and science teachers.

- Make math and science teachers full partners in the scientific community.

- Maintain close linkages with the States and the private sector through FCCSET-CEHR.

- Support public science literacy through mass media and parent-child programs.

- Continue to assist energy education through development of materials and school curricula.

- Broaden public science literacy programs.

- Provide fellowships and equipment to colleges.

- Provide technical and on-the-job training.

- Increase programs relating to undergraduate curriculum and materials development in the sciences.

- Support the increased participation of all population groups, including women, minorities, and the disabled, in science and technology careers.

Conclusion

In sum, the National Energy Strategy addresses the range of institutional and regulatory barriers preventing the best use of all of our Nation's energy resources–supply and demand, intellectual and physical. The implementation of this Strategy is inherently a shared responsibility. Working together at all levels of government and with the American people, we can achieve a cleaner, more productive, and more secure energy future.

The CHAIRMAN. Thank you very much, Admiral Watkins.

Admiral Watkins, this is the third energy crisis since I have been on this committee. In that 18 years, things have only gotten worse, production has gone down, consumption has gone up, we have half a million people in the Gulf. And I think we have to ask ourselves, how did we have such a triumph of ignorance as a country, such a colossal failure of will.

Now, I think it is because in the area of energy, there is no area that I know of, possibly save war and peace, where philosophy ripens into this religious dogma, this intensity of feeling that you have in energy. The producers, those people who want to develop ANWR, nuclear power, et cetera, are regarded by many as being greedy, obscene profiteers, environmentally polluting gas guzzlers, and otherwise nasty people.

Those who want to develop the soft path, conservation, alternate fuels, are regarded as soft-headed, sentimental, job destroying, big Government regulators, and also regarded as being nasty people. And consequently, the Nation has been frozen into doing nothing much for 18 years.

Now, our challenge is to be able to really develop a policy that brings in both sides of this equation. I remember just a few years ago when we were trying to do something on the budget and those two congenial Irishmen, Ronald Reagan and Tip O'Neill, met in the White House after we had been trying to work out a tough budget-balancing policy. And they agreed that—Tip O'Neill apparently wanted the higher revenues and Ronald Reagan wanted bigger budget cuts. And they drank out on the White House lawn and they agreed to go with the lower tax numbers and higher tax spending numbers. And consequently, we did not do a darn thing about the deficit.

Now, what I am worried about, about this energy policy, not necessarily yours, but I am talking about the country, the Congress, is that we end up doing nothing because the environmental side cannot stand the production side and vice versa. And so you end up with nothing, zero, what we have done for 18 years, which is nothing.

Now, I plead to my colleagues, I plead to this administration, that we cannot do nothing. We cannot agree to the same kind of approach that they had on the deficit. We cannot agree to not reduce consumption and not increase production. We just cannot afford to do that.

Now, in that spirit, I would suggest to you that we have to enrich the administration's program on conservation and alternate fuels. I just think we have to do that for balance. I do not care whether you believe it or not. There are vast numbers of people in this country who believe intensely with religious devotion, that we have to do something about that.

Senator Wallop and I have included CAFE standards in our proposal. Now I think we have to work to increase savings from CAFE standards. I really do. And I think we can do that intelligently on this Committee.

Our approach is to look at the criteria that go into producing the miles per gallon: the performance, the weight, the emission standards, the safety standards, the technological breakthroughs. I think we need to look at CAFE standards from those approaches and have everybody focus on how much power do they really want their car to have, what weight, what size, those kind of things. And then let that lead to a miles per gallon number rather than just picking a number out of the air and not having any idea what it produces in terms of performance and weight and size and emissions, et cetera.

I think that will help the debate, and I know you will help us do that, even though the administration opposes CAFE standards.

I hope you will look at the financing proposals of ANWR. For those who do not know, Senator Wallop and I have an ANWR development program, environmentally sound. But it takes half of those revenues, the half that do not go to Alaska, and puts them into paying for the conservation, the R&D, the alternate fuels, the clean coal, et cetera, et cetera, that are contained in your program and are contained in our program. You have to have a way to pay for it.

Nobody is going to vote for new taxes. That is out of the question. Nobody is going to be cannibalizing Social Security, and veterans' benefits, and all of those things to pay for it. How are you going to pay for it? It is no program. It does not produce all of those savings unless you can pay for it. ANWR will do it.

If we are going to ask the environmentalists to open up ANWR, then we ought to be willing to take that money and use it on some things that they want, like alternate fuels, like conservation.

So I hope you will look at that. We will look at your fleet standards. Senator Wallop and I did not include it in our proposal because we did not know exactly what it was going to be and we do not want to mandate things that will not work. But we want to work with you.

All I can say is, to my colleagues and to the administration, if anybody thinks we are going to have a revolutionary, comprehensive energy strategy, based totally on production, they are dead wrong. I can tell you this: Congress will not pass it. And anybody who thinks that the President is going to sign a bill based on only the soft path and the CAFE standards that does not have some energy production in it, is dead wrong.

We met with the President yesterday and the day before. We spent over an hour with him on this in the last couple of days. And I think he would be right not to accept an unbalanced energy package.

So I am pleading with my colleagues, I am pleading with this administration: let us come in with a balanced package. Let us do what we know how to do. Let us all lower our voices. This scarlet rhetoric that I keep reading, is not serving the national interest, and I hear it from both sides of the spectrum. I do not want to blame one side of the spectrum more than the other. It is not serving the national interest.

I ask the great newspapers of this country, I ask the great environmental groups, I ask the producing groups, to let us work together, reason together, give a little. Even if you do not believe it is right, much of America believes it is right, and it has to be part of the package.

Now, Admiral Watkins, I know you and I have spent much time with you and with Deputy Moore over the last few months, working on this package. I know you have a balanced approach. I know that the administration does not always speak with one voice, at least the members of the administration do not all have one mind. I know there are some over there who would like a policy based on importing oil. There are others who are strong environmentalists. And there are others who I think are balanced. And I think you are one of those balanced people.

I just urge you to do what I know you will do, and I ask for your response. And this is a softball. Will you work with us?

[Laughter.]

Secretary **Watkins**. We do believe that we have a balanced package, Mr. Chairman. That does not say that we do not recognize the reality of the legislative process. And the President, as you recall a couple of years ago, laid on the table a draft fact sheet called the Clean Air Act. It took us 18 months to get a bill passed, but we got it. And there was a lot of work done in that interim period. I do not think anybody is kidding themselves that we have a free ride to get one bill over the other.

I think the most important thing to do is to do exactly what you said. We need a lot of work to try to meld the differences that will continue to give us balance. There are some that look at balance differently than I do. How do you get to that balance and what is the degree of balance? We think the analytic underpinnings we have will permit us to continue a logical analytic discussion on this thing so that we can come to grips with the differences we have which should not be differences at all, because many of the words you hear around hear today, we are all saying the same thing.

But trying to get somebody to define what the differences are between conservation, efficiency, and integrated resource planning is very difficult. They all have different views. So we are certainly willing to work with you. We have seen your approach to CAFE, and it is a reasonable one. That is, we had that same kind of option in the package of CAFE issues.

There were a variety of ways to approach CAFE. Secretary Skinner and I felt very strongly that we needed to really reign the cart in on that, and get the same approach that is outlined in the executive summary here under CAFE, which I think takes an approach not unlike what you have in your own bill: a comprehensive analysis of feasible fuel economy levels, considering safety technology, economics, and the impacts of the Clean Air Act. Not a long study. We are not talking about a year. We are talking about this year. And by an external group that is divorced from the Department of Transportation and the Department of Energy on this issue and can be respected in all of its aspects. And we are going to aggressively go after that. And the National Academy has agreed to meet that time frame at least for phase one, which will give us sufficient underpinnings to know what we should do there. So I think that is a workable area.

The **Chairman**. By the way, I do not think that is going to be enough. I mean, if we are going to be able to do the production parts of this package, I think we are going to have to have more than just a study.

Secretary WATKINS. I agree with you there, but I think we will get an outcome from that study and can get it in the package.

The CHAIRMAN. In time to put it in this bill?

Secretary WATKINS. Yes, sir. I think we can. On revenues, I could not agree more with you. I think there are too many that overlook the fact that we cannot stifle the production which has revenue potential to achieve all the other objectives such as alternative fuels. We have to have the money in the deficit situation where you are trying to save $500 billion over the next 5 years. We have to have these additional revenues.

We have tried to work out a strategy that is very sensitive to that—to make it budget neutral, if you will, over the next 5 years. And we have accomplished that providing we can get these revenues. So we need that in addition. And we are talking about that transition.

The CHAIRMAN. Does that mean you will go along with our ANWR proposal to use those moneys to finance the strategy?

Secretary WATKINS. Well, we will work that out with you, Mr. Chairman, I am sure. I am not talking about the allocation of the dollars, I am talking about the total revenue that can come out of the leasing of the Artic National Wildlife Refuge. But there are other revenues in there.

We will see coming out very shortly from Interior the whole addressing of OCS, that is those areas that are not restricted by the President in his announcement last year. And I hope that we can look at those things with a very open mind on at least some selected areas in OCS that have as much as 10 trillion cubic feet of gas in them and at least somewhere between 3.6 billion barrels of oil which is the mean estimate at ANWR, and 8.8 billion barrels, which is the 5 percent estimate at ANWR.

So we are talking about billions of gallons of oil that can get us through this transition phase. People say, well that is not going to get you very far. Well, it will get us through the next 20 years in company with all the other things we are doing, and get us to the point where we can launch a real move to diversification of fuel and get us away from this situation. And we need those revenues to do it.

So I think it is very important that we think in those terms as well as needing the oil and the gas in the interim period under any circumstances.

The CHAIRMAN. Admiral Watkins, I know you have more in your answer, and I do not want to cut you short except I think it is probably best, considering the hour, that we hold ourselves to 5 minutes. And so let me cut my own time short and go to Senator Wallop. And with saying I want to congratulate you on the program. As I say, I do not think it goes far enough. I think this is the year we are going to do it. I really think we can do it.

Senator WALLOP. Thank you, Mr. Chairman. And let me add again my thanks to you for the development of this strategy. And I say that there is more in common between our approaches than they are at odds. And I also share the chairman's view that we try and lower the, as he called it, the scarlet rhetoric, and see where we can go to achieve real balance in our policy.

I say that because conservation is a sort of noble word. The problem is it is entirely too glib. Nobody ever gets down, as you pointed out, to saying conservation of what. I note with some dismay that our former colleague, now Governor of Florida, Lawton Chiles, said there was nothing in your policy about conservation. I have heard it around here. I saw it in commentary that was on the news last night. And yet you have demonstrated to us significant areas of conservation that exists your strategy.

Not to say that there could not be more. But it always strikes me that conservation is a good word so long as it affects somebody else, well let us make it policy. But if it affects us, we want to see if we cannot do it through incentive. It is just one of those kind of easier ways of doing things. And I think you well pointed it out.

I have three quick questions. One, I wish you would restate the argument, because some were not paying attention, and I think it is an important argument, that the national energy strategy saves more through its encouragement of alternative fuels, and it is leading us away from further dependence on oil, than does a CAFE standard of 40 miles per gallon. Could you just quickly restate that?

Secretary **Watkins**: Yes, sir. That is the case. And we have the data to back it up. Because we know what is going to happen with the energy strategy and the Clean Air Act as amended in terms of incentives to move to a higher number of miles per gallon. And therefore, to take credit all the way from 27.5 average to something in the year 2005 and chalk up to the 40-mile-per-gallon goal is not fair, in my opinion. It does not stand up. And we would like to see that analysis from those that are proposing this on the Hill, and then sit down with this committee, and bang out the differences. Because we think we have a very good, sound analysis now, agreed to by EPA, that makes sense. And our estimate of oil savings from a 40 mpg CAFE is 500,000 barrels a day in the year 2005.

On the other hand, there are alternatives to save 1.5 million barrels a day in the same time frame. And so that is the approach we are taking. In other words, some argue that if you do not agree with CAFE, you are not interested in conservation. And we believe that that is a faulty, simplistic rationale that has somehow gotten into everybody's lexicon. And we need to kind of get it out of there and do it in a proper and a sensible way similar to the approach that you are taking in your bill and we have taken separately in ours. And I think we can meld those together. And really, we ought to hammer that very hard in the very near time frame as a separate element of this strategy so that we do not let it fester too long. Because I think it is doing a lot of unnecessary damage.

Senator **Wallop**. I would agree with that. And I would hope again by way of restricting scarlet rhetoric, or however it is called, that we try to slip out of slogans which have a very strong embrace and into some real knowledge.

My second question is will your computer models and other things be available to the committee in assessing the effects of these and other amendments that may be offered as we develop this package?

Secretary **Watkins**. I did not get the first part of the question, Senator.

Senator WALLOP. Will your computer models, those that have given you these certain economic judgments and which are the basis of the graphs which you have presented to us, will they be available to the committee?

Secretary WATKINS. Absolutely. They are available to the private sector, the public sector. We will certainly make them all available to any analyst you have up here. We would like to make sure that they do in fact understand the base modeling, its limitations. We have not reached perfection, as you know. Part of our strategy is to build the National Energy Modeling System. It is going to take us several years, but we now have the baseline, and we can move from there. And we have the National Academy of Sciences helping us in that regard. And so since this is the first edition of a dynamic set to come every other year, as required by Congress, we have time to work that problem and improve on it.

Life cycle costing of energy, for example—how much does it cost to come out of the ground, what is the environmental cost of putting too much CO2 in the atmosphere, what do you do in the efficiency in the burning process, and what do you do for waste, either to the atmosphere, to the ground, or water? That is all in the system, but it is not good enough yet. We have to work on it. But we have the best models of anyone in the world, and I think we need to make sure that everybody up here that does the analytic work has total access to that. And we have access to their work so we can see the differences between 2.8 million barrels a day in the so-called Bryan Bill on CAFE, and ours, which we say is 500,000 barrels a day. And there is a misperception there that is confusing the debate.

Senator WALLOP. Well, that is the basis of my question. Because it would be helpful to us as a committee if we wish to slip out of the slogans and try to make decisions based upon a rational debate. Even upon things upon which we disagree, at least we will be doing it on the basis of some information.

The last one is just very quick. As you pointed out, I think the Japanese use one barrel of oil, I think you said——

Secretary WATKINS. Per $1,000 of GNP.

Senator WALLOP. And we use three. I would just like your comment on this. My guess is that because of the difference in the natures of our countries, we never would get to the one to one because density of population. Also the production of domestic natural resources will always add some to ours, whereas countries that import natural resources do not incur the consumption of oil per unit of GNP in the production of oil.

Secretary WATKINS. You are probably right, Senator Wallop. And it appears that when we go beyond 2010, because of the variable in there, you can make the models come out anyway you want to. But it does look as though that slope will continue for a while. Probably not down to the 1.1, which is the actual figure in 1989 for the Japanese.

Senator WALLOP. For example, it is going to cost us something in terms of energy to mine a ton of coal. It is going to cost them nothing in terms of energy to import a ton of coal, and yet both of those will contribute about the same amount to their GNP. And so, at some moment at time, apples and oranges become part of the equation. I think we ought not get ourselves wrapped in the sort of binding argument.

Secretary WATKINS. I absolutely agree. We are not looking at an absolute number. We are looking at our trend analysis. That shows some ability to absorb that shock in a better way. Remember that the unit was five barrels for $1,000 of gross national product in the United States in 1975. And that gives you an idea of the differences between five and three today. With all the other actions we have taken and now the energy strategy, we will be moving down even further, which says that the future is brighter than many people project.

The CHAIRMAN. Thank you, Senator Wallop.

Senator Bumpers.

Senator BUMPERS. Mr. Secretary, we have 3 percent of the known oil reserves in the United States and the Middle East has 60 percent. And so, obviously, when it comes to oil production and the use of oil and oil pricing in the world markets, they are going to be the big boy on the block for a very long time.

Now, in this proposal here, for example, the second one there, you say under this plan we are going to reduce the use of oil by 3.4 million barrels a day. We are going to reduce that through conservation efforts, I suppose, and increase domestic oil production by 3.8 million barrels by the year 2010. How on earth are we going to do that?

Secretary WATKINS. Well, I tried to outline that briefly, Senator Bumpers, but it is described in the Strategy exactly how we achieve that and in the analysis. So it is not pie in the sky. There are enhanced oil recovery techniques we are now working with in collaboration with the private sector, the opening of the ANWR range, the non-restricted OCS areas that are targeted. There are a number of ways to achieve this. And it is all in there. So this is not an optimistic approach, this is realistic.

Senator BUMPERS. If it is not there, we are not going to find it, are we? I mean, if the oil is not under Alaska and the United States, we are not going to increase production by 3.8 million barrels a day by the year 2010.

Secretary WATKINS. Senator Bumpers, the information just coming out from Interior indicates there is a 50 percent probability of finding 3.6 billion barrels of oil in ANWR. I do not know of any oil company that would not leap at the opportunity to lease under those kind of percentage projections.

They will drill for 5 percent projections in some cases. There is a 5 percent chance of finding at least 8.8 billion barrels there. So the expectation is very high in the oil industry. That is not going to be a great deterrent to them wanting to lease and get in there.

Senator BUMPERS. What is the price of oil going to be in the year 2010?

Secretary WATKINS. We have in the economic analysis in the so-called base case in the appendix all of the data that gives you exactly what the economic projections are, the GNP growth rates that are projected, and these are from the best CEA analysis. We accept that from the pros in the country. And I do not know the specific figure. We could get you that figure for the record, but it is in the——

The Deputy has the answer directly, so let us give it to you now.

Mr. MOORE. Senator, according to our economists we have with us, we are projecting in that year, 2010, in 1989 dollars, $32 a barrel price of oil.

Senator BUMPERS. How much?

Mr. MOORE. $32 a barrel in 1989 dollars in the year 2010 per barrel of oil.

You asked the question how are we going to get the 3.8 million barrels? We are figuring 3.2 million barrels from enhanced oil recovery, 500,000 barrels a day from ANWR, 100,000 barrels a day from the OCS. And in looking at the biggest quotient of that, which is the 3.2 million coming out of enhanced oil recovery, that is only representing a 15 percent improvement from now to 2010 in the technologies we have now, which we think is very conservative. That is almost a Schwarzkopf figure, if you will.

Senator BUMPERS. Mr. Secretary, we could, I guess, argue a long time about this. But I will tell you what I wish we could come back here in the year 2010 and look at that chart because as I say, I heard all of these debates in 1981. I voted to decontrol oil prices, but I never believed for a minute all of those charts about how production was just going to soar, if we would do that.

And you know as well as I do that for the past 4 years production in this country has declined 400,000 barrels a day a year. And we have had relatively good oil prices in the last 2 years.

Senator DOMENICI. Would the Senator yield for just one observation?

Senator BUMPERS. No, I will not.

Let me just ask you a couple of other questions. You mentioned how a lot of people talk a good game, but when it comes to asking the American people to change their life style that Congress likes to dump off on DOE. And yet, I am going to tell you there is a majority on this committee that favor increasing the CAFE standards. They supported the Bryan bill. It is the administration that does not want CAFE. That is a proposal to save more oil in the next 10 years than you will find under the most optimistic projections of what you are going to find in ANWR.

If I voted for ANWR I would still want to vote for the CAFE standards. Last year I had a residential energy bill over here where homes had to have an energy audit, they had to do certain things to become more energy efficient. Who do you think came over here and testified against it? The administration.

And I agree with Senator Johnston, I want to lower my voice and I guess everybody else does, but I also want to get the job done. And sometimes a little volatile debate does not hurt anything. We do that all day, every day in the Senate. We have differences.

Let me ask you a final question.

Secretary WATKINS. But when it is done within the administration we are criticized all over the press for having that same debate. I mean, CAFE is an incredibly complex important debate.

Senator BUMPERS. You ought to be in my job if you all cannot take a little criticism from the press.

Secretary WATKINS. I am just saying we should not be criticized for having that same debate internally in the administration. And I think that the fact that the President has allowed this open process to take place is unusual. And I think it is very important for everybody to understand we want that debate, we want it tough. We want it rigorous.

Senator BUMPERS. Well, Mr. Secretary, the flip side of what you said a moment ago about not asking people to change their life style, the flip side of that is happy talk.

I think that a lot of people up here are going to have to talk tough. And I am sad that the administration is not talking tough. This policy, most of this policy, in here is happy talk, telling people you just let the market decide and all of that sort of thing. That is not going to happen. It is just simply not going to happen.

Secretary WATKINS. But, Senator, CAFE does not change life styles. It allows them to drive further. Our data shows that if you increase the miles per gallon, people want to drive further, the same wonderful people that want to get out of the city and the suburb and get out into the big, wide-open country. They want to have more miles per gallon and they will drive further because they are getting more bang for the buck.

You cannot just look at mpg, unless you are going to restrict the miles they drive, then to look at just 40 miles per gallon is not going to be the only answer. It is not that it is bad. I am not saying that it is bad. Fuel efficiency has got to be enhanced. We agree with that 100 percent.

But I do believe that when you set a number like that we deceive the public, that people are going to drive only the same distances they drive now or that they are even going to want to buy those cars.

Senator BUMPERS. If that is true how do you account for the fact that the fleet average in the country of roughly 27.5 miles per gallon has remained static ever since the administration has refused to do anything about it.

Once we reach the mandatory level of 27.5 miles per gallon, and incidentally, twice DOT rolled back even that requirement, but the CAFE standard has been static ever since the administration let the automobile industry know that we were not going to do anything to increase it.

How do you justify that or rationalize that with what you just said?

Secretary WATKINS. Right now the average actual is 28.1 miles per gallon in the national fleet inventory. What we are saying is that in the Clean Air Act you have tremendous incentives to move in the direction you are talking about.

We, in the National Energy Strategy, have provided incentives to move to alternative fuels, alternatives to oil. And so we are coming at it from a different direction.

Senator BUMPERS. But you are proposing to give the automobile industry credit for building alternative fuel automobiles. Why not do both? Why not give them some credit? Why not encourage them or even mandate them to make some alternative fuel cars, but not give them credit on the CAFE standards?

Secretary WATKINS. I am not against some kind of fuel efficiency increase. I am merely saying that being an engineer, I come from that frame of reference that says we ought to do it in a way that includes the safety envelope which the current law does not consider, or the volumetric size of the automobile. We ought to include whether it is technically feasible, whether it is economically sound.

Do we want to deprive the automobile industry of jobs and so forth? Do we want to make this a big negative? Let us do the research study now on an aggressive basis in the next few months and come to grips with this thing once and for all. Are we building the Highway Death Act of 1991? I do not know. But I think we ought to look at it.

According to Secretary Skinner we are. And I do not know. I am not smart enough to know what highway safety issues are, but he does. And he says it is a very serious problem that we need to face.

Senator **Bumpers**. Mr. Secretary, my time is up. Just one quick question. I found some fine print on a footnote that says in your first chart there about the national policy, the base policy, as to what consumption will be if we do nothing.

As I read the footnote, you are not excluding from that what such savings as we are going to get from the Clean Air Act. Is that correct?

Secretary **Watkins**. The Clean Air Act Amendments, Senator Bumpers, are included as a part of the National Energy Strategy analysis. I am just telling you that. In other words, the Clean Air Act Amendments of 1990 and the National Energy Strategy are reflected in all of the curves.

Senator **Bumpers**. My question, though, is this, when you show, what you show there as the current policy base——

Secretary **Watkins**. That does not include Clean Air Act.

Senator **Bumpers**. That is right. So you are taking advantage, are you not, of the savings of the Clear Air Act in determining——

Secretary **Watkins**. Absolutely, because it is integral to the National Energy Strategy. We could not separate those out they are so tied together.

Senator **Bumpers**. We just need to know what we are talking about.

Secretary **Watkins**. It is in the appendix. It is well defined in there, sir.

Senator **Bumpers**. Thank you, Mr. Secretary.

The **Chairman**. Senator Hatfield.

Senator **Hatfield**. Mr. Secretary, I would like to link the authorization to appropriations again because we are only talking about authorizing something here. Now we have to talk about the vulgar subject of money. As you know, buildings constitute about 35 percent of our national energy consumption. And I note that in the budget for solar buildings, as an example, the administration has asked for a reduction of about 50 percent, which in effect almost phases the program out.

I note also in the 1992 budget, as far as national energy strategy shows, a commitment to what I call minor increases in funding. Now, I realize there is other than merely the appropriation and money that is being given out to research for renewable sources. What I would like to ask is what are the incentives or what are the other procedures by which you can attract capital investment in either research for renewable sources of energy or for the application.

And against on further point backdrop, I am appalled that in the capitalistic system at this point in time, I am told that it is cheaper to build out of virgin materials than to use or remodel or recycle or whatever existing material. I have the soft drink industry in my State visiting me about the so-called returnable container bill that I have introduced for 24 years in the Senate. And they said it is cheaper to use new aluminum and new glass than it is to recycle existing.

Now, I do not have to attack just the soft drink or the beer industry or older buildings that have to be remodeled or can be remodeled as against new construction. Old buildings that are built probably better than the craftsmen of today build new buildings, and yet it is cheaper to tear them down and replace them with virgin materials. Now, I know that has a lot to do with the question of energy. So my question is again, what are the appropriation requests going to be to match this strategy and what are the other incentives and other ways to develop capital besides the Federal Government appropriating.

Secretary Watkins. Let me talk about one general point, Senator Hatfield, and then I do not have the expertise to answer the last portion of your question, and I am not sure I have a witness here today that can. But we will provide it for the record.

[The information was not received at the time the hearing went to press.]

Secretary Watkins. I do want to talk about the Department's conservation and renewable energy's budget. Since President Bush has taken over, the 1992 budget reflects a doubling of what we put into it from the old $200-plus million to over $400 million this year. When we get into a debate on what is in our conservation and renewables budget, we invariably get into the debate of what are you doing with the conservation grants. The conservation grants are very specifically targeted at weatherization and that sort of thing in the States.

That comes from the excess profit tax business from the last decade. And we have those oil overcharge funds that we have to administer. There is almost $2 billion of unused overcharge funds sitting out there in the States. And at a time of budget deficit, we think it is irresponsible to keep putting in $227 million of conservation grants when there is plenty of dough out there that has not been spent on conservation. And so that keeps getting thrown in to why we are cutting our budget every year.

We are not cutting our budget. On the legitimate things, we have doubled the budget. We are serious about renewable energy, but we are not serious about throwing in $227 million of conservation grants where there is plenty of money just to provide the States another thing to invest in some other way. And they reap the benefits and the America taxpayer have to pay for it. I do not see why we are doing that. So that is one element of the answer.

The other element is we are serious about this housing business. We are working very closely with the National Association of Home Builders on their energy program to improve the energy efficiency of new residential construction. And we believe in working with the private sector and with cost sharing. We have enough in there to achieve our objective. And we think it is a very important set of objectives.

We have signed an agreement with the Department of Housing and Urban Development (HUD). For the first time, the DOE and HUD have come together on this issue. And we are serious about it, particularly low-income housing where we are paying too much in lighting bills, or we are turning off the lights and not letting the poor people that are in there have adequate heat in the wintertime, for example. Now we can do a better job on that. And we are. And we are serious about it.

So I wanted to put that into perspective. I cannot tell you about the construction materials, and I do not know that we have anyone here today. Maybe Henson Moore can help me out.

Mr. **Moore**. Senator, we just checked with our people in the Conservation Office, and they indicated that you are correct. There was in the budget request for fiscal year 1992, a reduction from $2 million down to $1 million on the solar home. And the reason for it was not a lessening of interest in it, it was the fact that our scientists tell us they have about reached the potential for the amount of money we are spending.

They feel that spending an extra $1 million is not really going to accomplish that much more in the next fiscal year. And they felt they had other solar projects that really could use that extra million dollars more than putting it in that particular housing program in the next fiscal year.

Senator **Hatfield**. I am sure that can be argued like the chicken and the egg, but at the same time, Senator Bennett Johnston and I both serve on the subcommittee dealing with energy on the appropriations, and I hope, Admiral, that we will keep a very close rapport as to implementing the strategy, whatever is developed, in terms of making it financially possible.

Secretary **Watkins**. I agree with you, Senator, and we are not trying to short change anything in this area. In fact, as you know, you supported the Appropriations Committee in additional monies for our child development center at DOE both here and in Germantown. And that is going to have photovoltaics in it. It is going to have solar collectors for hot water. It is going to have the best and latest in efficient lighting and in smart windows.

The special installation is going to be a model to be able to show people like yourself and others interested in this what we can do with state of the art. The significant reduction in operating costs is so dramatic and we can amortize this building in a very short period of time.

The executive order coming out from the President in the near time frame will have standards set by us for all the Federal agencies. That, I think, is another demonstration that we are serious about what we know is a major problem for the future in planning. That if we cannot address the 40 percent of the electrical generating capacity in this Nation that is needed for the buildings, we are not doing the job right. So we believe very strongly in this.

I am certainly not going to short change anything that is worth while, but I do believe that there is a tendency sometimes among people to look at dollars and say, well, you do not have enough dollars for clean up. Well, we cannot handle any more dollars than we have. We cannot manage what we have now. We do not have the human resources or even the technical knowledge to deal with some of these things. So just throwing dollars at it is not going to necessarily give you a better product.

So I think we are at the point now where we have the analysis to come up and show you that we think we are spending those dollars the right way.

Senator **Hatfield**. Admiral, let me have just one last question, a quick question, a regional question, Mr. Chairman, if I could. I will follow up with you later in communication.

Admiral on page 37 of this report, the National Energy Strategy, First Edition, you recommend phasing out the Federal subsidies to the power market administrations and you refer to the subsidy of the U.S. Treasury financing of some $4 billion accumulated to date. Admiral, would you support the privatizing of that debt to get the Federal Government out of that business, and perhaps to be able to get a $3.5 billion check from the refinancing system back to the Treasury?

Secretary **Watkins**. As you know, Senator Hatfield, I am precluded by law from even studying that particular issue. I have been over here now only for a few years, yet have been beaten about the head and shoulders on that one issue. It is like coming up here with a red flag and a bull and goring myself and being thrown out without a quid pro quo of any kind. So it is not one of my most attractive initiatives in here. I recognize that it is not going to be all that well received up here.

Senator **Hatfield**. Admiral, you are being too modest.

[Laughter.]

Secretary **Watkins**. I am really not in that ball game, Senator Hatfield, as you know. And I cannot answer your question. If you would like us to try to come up with something for the record on that, we would be glad to work with the Office of Management and Budget.

Senator **Hatfield**. I do not want to press you on it at this point, but I just want to set the stage, because I think perhaps we can eliminate from your strategy by repaying that an privatizing that debt. And then you will have a very major accomplishment in your overall strategies.

Secretary **Watkins**. You have obviously done your homework, Senator Hatfield, and I have not. I will work with Director Darman on that, sir.

The **Chairman**. Thank you, Senator Hatfield.

Senator Wellstone.

Senator **Wellstone**. Thank you, Mr. Chairman. Admiral Watkins, thank you for your testimony.

Let me first of all reemphasize Senator Bumper's concern about CAFE standards. I have some of the same concerns. And I hope we will be working closely on that. As for your response about CAFE and people leaving the ghetto—I was not clear what you meant. And I would like to visit with you at some later time about that comment.

Three quick questions. First of all, on the cover of your study, you show several new sources of electricity: solar, photovoltaic, solar thermal, and wind. But I gather that nuclear power plants are going to play a major role in new electrical power generation in your strategy. And I want to ask you two questions. First of all, how many nuclear power plants are assumed in your strategy by the year 2030? And second of all, given this emphasis on nuclear power, compared to your base case projections, does electricity from photovoltaics, solar, thermal, and wind go up or down?

Secretary **Watkins**. It goes up significantly from 16 percent more in 2010 than we have today, to something significantly greater than that after 2010. Well, we do not know for sure because as you go further out you can make all kinds of assumptions that affect the projects. But let me say it is going to be closer to a doubling of that increase. In other words, going up another 16 percent, something of that nature. Now there are projections out to 2030 for renewables in the strategy. You will see that in the analytic work.

Senator **Wellstone**. What is your projection on nuclear power plants?

Secretary **Watkins**. The nuclear power plants, basically, are peaked out now at 110 plants with a total generating capacity of about 100 gigawatts. Recently, the Nuclear Regulatory Commission has published a draft rule which would allow the service life extension of selected numbers of those plants. By the year 2000, then, we will, as you can see in the strategy where the break-out of nuclear power, renewables, and all of those are shown, you will see that nuclear power stays about constant until the year 2015 in terms of the amount of capacity and its contribution to the national grid.

And so it is from 2015 on then that we begin to see the growth in nuclear power again. It is growth because of the new advanced light water systems, the more passively safe systems, the expectation that we will achieve our objectives in the waste repository, and we recognize that those are questionable right now. But we think that we can solve them. They are not technical issues.

Senator **Wellstone**. Do you have a number in the strategy as to how many plants are assumed by the year 2030?

Secretary **Watkins**. I do not have the number of plants but they will retain about 20 percent of the total electrical generation capacity of the Nation. That means more capacity because your gross national product is going to grow. This is growth strategy, and therefore you are going to need more capacity to hold the line. But I believe it is about a doubling by the year 2030.

Mr. **Moore**. The number that is actually in the Strategy is 194 gigawatts by the year 2030, but it is still only about 20 percent of the total electrical-generating capacity of the Nation, which has to grow if we are going to have growth in the Nation.

Senator **Wellstone**. We might want to revisit on some of these projections. I have been trying to investigate this data myself and have encountered some different, higher projections of the projected number of nuclear power plants, but maybe we can talk more about that later.

Second question. Your strategy is rooted in free market principles. You talk about that. But some of the energy sources such as oil and nuclear power, are receiving enormous government subsidies right now. Only last year the administration supported $2.5 billion in tax subsidies to the oil industry, and the nuclear industry is subsidized by liability insurance, by nuclear fuel production, and waste disposal.

My question for you, Mr. Secretary is, how can you call this a free market in energy policy? If we were to have a free market and a truly level playing field, would you not either have to (a), cut these subsidies for these sources of energy, or (b), provide subsidies for competing sources of energy, like efficient energy use?

Secretary **Watkins**. Well, I am not sure. You have made a statement that I cannot totally agree with, Senator Wellstone, so it is hard for me to answer the question. But let me state it this way, that there is no one in this business that understands more than we do that energy is not a free market in this country. It is the most regulated, complex set of issues that I have ever seen.

You only have to look at hydroelectric power and the relicensing of that alone to talk about what we are doing to ourselves, not to take advantage of existing power, existing turbines on existing dams. If you get into electricity, you have got another rat's nest of regulatory interference in the free market. When you get into environmental technologies and how they impact on free markets, it is extensive.

So none of those things are particularly bad, but they need cleaning up. So there are a lot of, you might say, subsidies built into the regulatory process that we are trying to eliminate.

So the rate payers are now paying a mil per kilowatt hour for the expectation that they will have a waste repository for nuclear power plants in the future. That has built up a significant amount of dollars, $2.6 billion or $3 billion, I believe, to date. There is a concern by the utilities regarding this cost being borne by rate payers, unless we can prove that we will have a repository. So that is coming from the taxpayers. That is a subsidy in a sense, but it is being paid for by the American people directly.

Now, I do not know how you——

The **Chairman**. That is the rate payers, not the taxpayers.

Secretary **Watkins**. The rate payers, I am sorry. So I am not sure where we go with an issue like, are we going to continue subsidies or not. To me, the name of the game is to minimize what we have to do in subsidies, and to incentivize those things that we think have a great potential. So when we talk about subsidies, some are not so good, some are proper. I think we have got the right mix of incentives in our energy strategy. We are trying to eliminate those that, in a de facto sense, are subsidies, such as to clean up the regulatory morass in access to gas pipelines, for example.

Or hydropower relicensing that now takes 7 years. That is very expensive. People are turning off the switch rather than relicensing. It is too hard. We are trying to say, let us streamline it, let us get it down. Let us clean up our act. Let us not have 23 agencies that have to work on an EIS, every one of them has to vote on it. Let us have one agency. Make it EPA if you want to. But let us have one agency control the environmental impact statement.

We are doing some silly things right now. We could extract 100,000 barrels of oil a day in California alone, if I could put a 4.5 mile pipeline on Federal lands to give the gas to the fields that could pump out that oil, and that has been sitting with faceless bureaucrats sitting on top of it for years.

Well, these are the things that are costing the taxpayers and the rate payers money. So those are kind of de facto subsidies, in my opinion, that have to be eliminated. And we are going to be doing a lot of that in energy.

The CHAIRMAN. Admiral, would you withhold, and if the Senator would yield, I think it is important that both of these bills, referred to as subsidies, came out of this Committee, and I, for one, do not want to let it go by, to say that these are subsidies.

With respect to nuclear waste, the mil per kilowatt hours is paid by the consumers of nuclear electricity. It is not a Government subsidy. It is, in effect, the industry paying for itself. I mean, we do not pass it along to the taxpayers in general.

With respect to insurance, Price-Anderson, it is not a subsidy at all. Really, it is a protection for people and it provides for liability without fault, which they would not otherwise have, a huge program, which in turn is also paid for by the utilities themselves. With a Government underwriting, to be sure, but paid for by the utilities into the fund.

And so I really do not think it is fair to say either one is a subsidy, although both have been called a subsidy, but I think it is paying for by themselves.

Excuse the interruption.

Senator WELLSTONE. No, that is fine. Maybe we can use another word. I am just looking for a more level playing field and the same kind of support, if not subsidy—a commitment to efficient energy use and renewables.

One final, quick question, if I could, Mr. Chairman, or have I run out of time?

The CHAIRMAN. You have, but I just used up some of your time. So take another question.

Senator WELLSTONE. Well, this can be a quick one. This is for Ms. Stuntz. Yesterday, at a briefing, I think Ms. Stuntz said that the National Energy Strategy's cost benefit studies, assigned a zero value to environmental protection and to energy security. Economists refer to these as externalities. And the question that I have is, why not include these externalities? This may get us back to the discussion of what is a subsidy or what is not, or what a cost is. But why not include this externality in your calculation?

Ms. STUNTZ. First of all, I did not say we assigned a zero value. I said it is not reflected in our analysis because, despite a lot of work, we could not, with EPA and others, determine how to do that in all places for all energy sources. We could not even define what necessarily is external. What is not, for example, in the aftermath of the Clean Air Act debate, included in the market price of electricity.

The same thing happened on energy security. We went through a very difficult and I think important exercise, to try and determine whether there is an energy security premium attached to oil—you are very well familiar with the issue—that is not reflected in the market price. And there just is no consensus or analytical way we know of right now to say, yes, this is it and it is definitely not reflected in the market price.

And so rather than say those things are or come to a determination that those things are zero, we simply said, they are not credibly within the capabilities of our modeling system and we are not going to tell you that we have arrived at a single number. That is sort of a qualitative consideration that has to be kept in mind as we go through all of these issues.

Mr. MOORE. Senator, if I could take it one step further. We have recognized this issue. For some 20 months now, we have been laboring over this project. There will be an announcement next week that I hope you would find favor with, as a result of the effort in trying to arrive at the methodology of how you do calculate what is the total fuel cycle cost.

The Admiral challenged us to do that very early on. We have been working with the European Community, and Japan has agreed to work with us and possibly other countries will be added in the future. There will be an announcement next week that will be made in consonance with this National Energy Strategy about how we are moving forward to do something about that.

What Ms. Stuntz is telling you is correct. We have nobody with any agreement right now on how you measure that. We hope to solve that problem in very short order.

Senator WELLSTONE. Let me just add, I am very relieved to hear that because I would like to see the environment figured into this cost benefit analysis, and until you do so you have assigned it a zero value. That is to say, it is not figured in at all. And I think it needs to be figured in.

Mr. MOORE. There are different ways to interpret it. We agree with you it should be figured in. What we are saying is we do not know how to do it right now. We are not saying it has a zero value. We are saying we do not know how to do it. Therefore we did not put a number in.

The CHAIRMAN. May I also add on the question of subsidies, on the nuclear subsidies—you can call them that, and some do. We clearly subsidize other forms of energy, and I think properly so. Ethanol has a big tax credit, solar geothermal, for example. On PURPA, we just passed legislation on PURPA, not only to give what some would call a subsidy, but requiring that that electricity be purchased.

Clean coal, we do a huge amount of subsidy. Oil and gas, huge amount of subsidy. What I think we need to do is not say that all subsidy is bad, but study it to see if it is cost effective and produces the kind of energy we want. I hope we will do that, because one of the things we want to do is take that money from ANWR, if we get it, and use it for research and development on some of these conservation and alternative fuel things which are going to cost a lot of money.

A subsidy, if you will—but we need to subsidize some of these emerging solar technologies, some of these alternate fuels, electric cars. I mean, they have to have subsidy if they are going to emerge. Subsidy is not necessarily bad.

Senator WELLSTONE. I did not say it was.

The CHAIRMAN. Well, if I might just point out, until recently, wood stoves and the manufacture of efficient stoves was subsidized, too, and not paid for by the consumer.

The **Chairman**. Senator Domenici.

Senator **Domenici**. Thank you, Mr. Chairman. First, let me say that I truly hope that, for the first time in many years, we might be getting to a point where we can get a bill that is balanced and does something for our country and our people.

Let me ask you, Admiral, as you proceeding with this overall study and the White House evaluation of the overall policy, is it fair to assume that, as involved as you had been in the past in other things, that this turned out to be a very complex subject as you finally completed your deliberations and that you learned a lot?

Secretary **Watkins**. It was tougher than AIDS, Senator, which was an order of magnitude tougher than running the Navy, where you give right full rudder and everybody goes to the right, which was wonderful.

[Laughter.]

Senator **Domenici**. I am sure it has been a real change in your lifestyle to find that that does not happen in the Department.

Secretary **Watkins**. No, it does not.

Senator **Domenici**. Mr. Secretary, when we first started this, when some started this debate anew after the current problems in the Middle East, the phrase "energy independence" was out there. Now, I have been looking through what you were suggesting, and I do not think I have seen the use of the phrase "energy independence."

And as I look at your charts and, even in my mind's eye, add the real or unreal claims of others who would add more for conservation or more for alternative sources, it becomes obvious that we are going to be using a lot of foreign oil for a long time; is that true?

Secretary **Watkins**. Yes, sir, that is correct.

Senator **Domenici**. So we are not busy about developing a national strategy to become independent of foreign oil, but rather what?

Secretary **Watkins**. Less vulnerable to oil shocks in the future, more efficient as a nation, diversification of fuels so we are not totally dependent in our transportation sector on oil that is now almost two-thirds of our consumption of oil. I think you have struck on a very valid point.

We did not know about energy independence until we went through this 20-month process. It is very clear, it just stands out. In fact, it stands out so vividly that this is a worldwide fungible commodity which we do not control anymore.

We have to be very sensitive. We have bilateral, multilateral alliance agreements with friendly nations all over the world that rely heavily on oil, and we cannot write them off. So just by doing our own thing here in the country more efficiently and better, we still have major problems about oil vulnerability to other nations and friends in the world.

So it came out as a major national policy issue now, that will have to be reflected in the "new world order," and I believe that is a very serious move now on the part of the administration to define that new world order, particularly in this area of the world that is so unstable that we are now involved in.

Senator DOMENICI. Mr. Secretary, you having kind of redefined where you are taking us from independence to other very admirable goals, and I assume they are realistic and the other is not.

Secretary WATKINS. I would like to do the other, Senator, but it is just not realistic.

Senator DOMENICI. Let me just ask you, in the first five or six or seven years, and you picked some very current number of years where the effect of this policy is least on imports, as I view all the graphs, we do not get into real serious diminutions in the importation for a number of years because in the early years it is more difficult than in the out years; is that correct?

Secretary WATKINS. Well, you can see from the charts that we make an impact really right away, Senator Domenici, on some reductions from what we would have had. But if you are talking about a turndown from current levels, the answer is no, not until about 1995.

Senator DOMENICI. Mr. Chairman, I do want to say that I am very hopeful that you have set the stage not only for a good debate, but for a number of Senators and the administration to share facts. For instance, Senator Bumpers, when I asked if he would yield a moment ago, and I do not like to talk about something that a Senator asked when they are not present, but let me just suggest he was questioning your production figures in the early years, production of oil.

Frankly, I do not think very many people have looked at the secondary and tertiary oil that the United States has, and that is what those early years of recovery are all about. And I just want to state in the record for those who are interested, that is not new oil; that is oil we have already found. It is in the ground, it is under wellheads, and it is an enormous amount of oil.

As a matter of fact, in the next 10 to 15 years, properly sensitized, it could double America's reserves without drilling another well. And you are suggesting we get that out of the ground——

Secretary WATKINS. Yes, 3.2 million of the 3.8 million barrels a day increase in the year 2010 is oil taken out of the ground in a cost-effective way through enhanced oil recovery, the resources that are sitting there right now waiting to come out. With the kind of collaborative effort we have now going with the oil industry, we believe we can do that without any question, get 3.2 million barrels a day. That is the bulk of it in the time frame we are talking about.

Senator DOMENICI. All right, we have already passed some tax incentives for that, and in due course, for those who think they are wasteful and typical incentives to the oil and gas business, which some do not like, I think we can circulate as to why they are justified how much we get back.

It is an enormous return on our money, and most of all, I think we sooner or later have to face up to the fact if we do not take that oil out of the ground, each year we lose literally millions of barrels that can never be recovered again. So we ought not just say, you cannot recover it. We ought to say, how do we recover it.

Because it is ours, it can be taken out in environmentally sound ways, and we ought to get on with it, and I think we can prove that up.

Let me cite two other things and ask you for some record information. There are still many who do not know about PURPA. That is a funny-sounding word, and as I say it I am not even sure I could tell you what it stood for, but Senator Johnston and I worked on it a long time.

We did extend it and expand it, and while it is contentious, I think we ought to have, for the record, the significance of PURPA in adding to the marketplace availability of solar energy, wind energy, and—what is the third one that we did? Geothermal.

Because it seems to this Senator that in speaking of incentives, there is one where we said to the marketplace, you take it even if it is too expensive and put it your grid and buy it. And now we are almost at market value.

I think we need in the record how effective that has been, because most people do not think we have done anything in solar, and that is the most effective solar program in America.

[Subsequent to the hearing the Department of Energy submitted the following:]

Since the enactment of PURPA in 1978, over 60,000 MW of Qualifying Facility (QF) capacity has been filed with the Federal Energy Regulatory Commission, and about half of that is operational. The large majority, approximately 80 percent, of the capacity added under PURPA has been fossil fuel-fired cogeneration. Renewable energy generating capacity under PURPA totals over 8,000 MW. Of this total, 350 MW is solar, 1400 MW is wind, 700 MW is geothermal, and the balance is primarily biomass and hydroelectric. Without PURPA, very little of this renewable generating capacity would have been built. Thus, PURPA has played a critical role in assisting these technologies to gain a foothold in bulk power markets. The PURPA reform proposed in the National Energy Strategy will improve the opportunity for renewable technologies to compete by permanently removing unnecessary capacity and relaxing co-firing restrictions.

Secretary WATKINS. That is part of our strategy, as you know, Senator Domenici. We have worked with you on that before. The Public Utility Regulatory Policies Act of 1970 reform that we are talking about would permanently remove the capacity limitation, which I believe has been temporarily lifted from the former 80 megawatts per plant. We believe that is very important, and we also propose to reduce the fuel use restrictions which gives us the opportunity, then, to provide additional natural gas cofiring of some of those projects. So PURPA reform is very, very important.

It may seem like a complicated issue. PURPA is a funny name, and I am not that familiar with all of the aspects of that particular law, but this one is a limitation on renewables, and we are saying, remove it. So when people look in and say we are not doing enough on renewables, we are doing a lot that is more than budget. It is regulatory reform as well, which is very important in this particular case.

Senator DOMENICI. I have many other things, but let me just ask you about one other. I believe part of America's strategy that should emphasized is the policy of maximum use of natural gas in the United States. I cannot believe that we would develop a policy in this country which would not do that, considering the environmental aspects, which are all plus; considering the economic aspects, which currently and for the foreseeable future are all plus; and considering its abundance, which instead of going down in reserves is going up because of new finds; and in methane coal seam gas, which is being found.

Could you tell me how much is in your policy, the NES, how much of it is dependent upon natural gas in the next 10 to 15, 20 years, if you have numbers. And if you do not today, would you get them? And is it an important part of the strategy, and would you kind of quantify that for us?

Secretary WATKINS. We can answer some of those questions, Senator Domenici. I'm going to ask Henson Moore to give you the specific answers. We have in the Strategy, as you know, really focused on the deregulation of natural gas. We have worked with Chairman Martin Allday over in Federal Energy Regulatory Commission on this. It has come up in a very vivid way with what I call the current case study in the Middle East situation where we exposed so many problems in the regulatory process for gas pipeline certification.

There were 38 projects sitting there that we felt needed a more streamlined policy to regulatory relationship to allow that gas access for backing out oil where we can use gas in base generation, which is now quite acceptable to everybody. So we have got-a lot of reform in here, but we do have some specific answers to your questions.

Senator DOMENICI. Why don't we, in the interest of time, submit the specific answers regarding some quantification of natural gas and the policies.

Secretary WATKINS. We will submit that for the record, Senator.

[Subsequent to the hearing the Department of Energy submitted the following:]

Natural gas will play an important role in the National Energy Strategy (NES). As a result of NES actions, gas consumption is projected to increase by 1.2 trillion cubic feet (tcf) in 1995 (about a 5% increase in consumption) over the consumption that would have occurred without actions. In the year 2000, increased consumption attributable to NES initiatives is estimated to be 1 tcf. Total gas consumption in that year, including the 1 tcf increase resulting from NES actions, is projected to be 24.7 tcf, an increase of about 28% over today's level. Domestic production of natural gas is projected to increase by over 1 tcf by 1995 as a result of NES actions.

Senator DOMENICI. Can I just say I will submit a written question on your deregulation of pipelines, which I wholeheartedly support as I understand it, but I would like you to answer, with reference to Canadian gas, a very specific question that I think bothers many independents in the country.

[The information requested was not received at the time the hearing went to press:]

The CHAIRMAN. Thank you, Senator Domenici. I might mention that the record will remain open for 2 weeks for answers, but Members are requested to have any additional questions for the witness to the committee staff by noon tomorrow so the witness will have time to answer them.

Senator Wirth.

Senator WIRTH. Thank you very much, Mr. Chairman. Thank you for your patience, Admiral Watkins. It is a long morning here.

I first of all just wanted to say for the record that I really appreciate what you were talking about in terms of enhanced oil recovery. Your projections are that we get 3.2 out of your total new production of 3.8 from enhanced oil recovery. That is encouraging. I want to come back to that, about how you got to the assumptions.

It is also interesting to note that while a lot of people have felt that the big increase in domestic production in your plan was going to come from the drilling in the Arctic National Refuge, in fact that is only projected by you all at about 500,000 barrels per day—not "only" 500,000, that is a lot of oil if that were to come out. But enhanced oil recovery is really the biggest piece of this.

Secretary WATKINS. That is near term, though, Senator Wirth. And obviously we are talking about a time frame that is 2010. We have a lot of work to do before we pull out the first oil in the ANWR range.

So I do not want to say that it is not important because eventually it comes on very strong and allows, in the one curve there, the modest increase in oil production potential in the country. Otherwise, that slope would be much deeper. Though I do not want to minimize the importance of ANWR, and I would not want to look at certain time frames, like in 1995.

So I do not want to compare that with enhanced oil recovery, which is giving us oil today with horizontal drilling and other techniques.

Senator WIRTH. Both of those depend on certain assumptions about price. Where is the price of a barrel of oil today?

Secretary WATKINS. It is nominally, I think yesterday it was around $20 to $20-plus. It has been oscillating between $22 and $20 the last few weeks, since the outset of conflict.

Senator WIRTH. And what are the assumptions that you are making about what is going to happen to the price of oil?

Secretary WATKINS. In the economic assumptions that are in the appendix for this report and in the basic data base in our economic projections, it ramps up in the year 2010, as we noted earlier in the testimony, to $32. And that is in 1989 cost of dollars.

Senator WIRTH. So we are assuming a relatively constant steady increase in the price of oil from today's $20 to about $32.

Secretary WATKINS. In the year 2010, 20 years from now.

Senator WIRTH. There are many, however, who believe that assuming that the war in the Gulf if over relatively soon and absent some catastrophe that none of us can predict, that there will continue to be a very significant glut of oil on the world market. And if that is the case that the price of oil will continue to tumble.

Secretary WATKINS. I do not agree with that, Senator Wirth, at all. Those are the same pundits that predicted $60 to $100 oil as soon as we went into combat, when it went down $10. I would not listen to them anymore.

Remember this, that we are on the margin right now in the world. Saudi production is up to 8.5 million to 9 million barrels a day and is making up, primarily, the margin we lost with Iraq and Kuwait. What Saddam Hussein is doing to the fields in Kuwait is atrocious. He is setting up a mechanism that will not allow those fields to come back for 2 years.

Now, are we going to allow him to sell oil on the market unless he complies with the UN resolutions for reparations and everything else? What are we going to do with that? So I do not see that oil coming on line.

We have demanded of the Brent Fields, our own fields, full production. We have not shut down for maintenance. We have not done the kinds of things that you do to maintain a field. We have also asked the Saudis to go way beyond what they normally do. They have agreed to do that.

I think we have to be very cautious before we expect anything but a short spike down. And I do think that will happen, but it will not be a long spike.

Senator WIRTH. It is important that we all understand what the assumptions are here. And yours is that we are right on the cusp of world production and that instead of the price dropping, the price is going to have that kind of consistency.

Secretary WATKINS. There will be a short-term drop, then we expect that it is going to come back to a nominal level about what we have today.

Senator WIRTH. And having that higher price is absolutely imperative in order to justify the enhanced oil recovery and in order to justify production at ANWR, is it not?

Secretary WATKINS. I refer your staff, Senator Wirth, to the base line that we have projected. We have three different base line scenarios. One with a periodically oscillating oil price and another shock. In other words, we have a variety of scenarios we have looked at that looked very realistically at the world situation regarding oil for the future, and I think we have got a band that covers all of those particular items that you are talking about.

Senator WIRTH. I looked at that analysis. And even within that band, if you drop somewhere below $20 all of the assumptions that you are, most of the assumptions that you have made related to enhanced oil recovery and in ANWR go out the window if you drop below $20. It is very hard to make any of those a reality if the price were to drop.

Secretary WATKINS. But the Middle East nations own two-thirds of the oil reserves. And I guarantee you in my discussions with them, they have no desire to see the oil be other than somewhere between $19 and $23 a barrel today. They control that. We do not control that price.

Therefore, they are not going to be anxious to have this oil price drop to $10 or to $13. I think they are very serious about that. They are interested in a new relationship with the Western World.

I think we are going to see a different kind of an order come out of that part of the world with the responsible Arab leadership that we now see in coalition with us.

Senator WIRTH. I hear what you are saying, but looking at my own experience of 16 years or 17 years of sitting on energy committees up here, for us to be dependent upon the good will of a number of Arab governments for price stability, I think, would not make a lot of sense.

But we are dependent. Your assumptions are dependent on having a relatively stable and relatively high price.

What I am getting to is would we not be better off, or would it not be a smart thing to do to put in line here something like the floor price that has been suggested in legislation, S. 215, offered by Senator Johnston? It seems to me that that floor price is below the assumptions that you all have made, so presumably it would not kick in, it would not do any harm, if things went the way you assume. But if, in fact, our relationships with those Arab countries were to go awry, and we certainly have had an experience of them going awry in the past, then we would have some guarantee of a price floor, which in turn would help in terms of our national energy strategy to assure that there were the economic incentives there to make enhanced oil recovery and to make other exploration happen. And certainly all of the alternative fuel programs would be helped.

It just seems to me the logic of where you all are going and your whole strategy suggests that one of the safest and easiest and harmless things to do would be to have that kind of a floor.

Secretary **WATKINS**. Let me just first answer Senator Wirth, and then I would like to ask Henson Moore to follow up.

As you probably know, we prepared an option for a variable oil import fee as one of the many options that the President was considering. In fact, that was one of the 57 options. It was unanimously rejected by all of us on the EPC. There was not a single person in the administration that supported that for a variety of reasons because we were doing some other things in the Strategy that we think will offset the need for something like that.

But in that option paper, basically these were the key points. We felt it would hurt American companies and foreign competition. We felt it would increase cost to consumers without increasing security. We thought it would hurt the gross national product. For example, if a variable fee were used or imposed to support a $25 per barrel oil price floor, the associated GNP losses would amount to about $150 billion.

We thought it would be considered a violation of the General Agreement on Tariffs and Trade. We thought it would open the door for other nations to impose fees on U.S. exports and would have an adverse regional impact transferring wealth from oil consuming to oil producing regions.

There were some pros on the other side in the option paper. But I think this carried the weight in the debate. So it is not as though it is an idea we did not consider. Certainly, we have received letters from governors of the oil-producing States all asking for this, having some kind of a variable import fee and arguing we need to have this for investment incentives.

But I think right now with the other programs that we have we think we can offset the need for that. And I do not see that this drop in the price of oil is going to be a reality for more than a very short period of time.

Senator **WIRTH**. Again, I hear what you are saying. I cannot imagine how having a floor price would cost consumers if the assumptions of your plan are that the price is going to be almost 50 percent more than the floor price or how it would hurt GNP if your assumptions are that the price of oil will be higher.

Secretary **WATKINS**. It is a matter of what price you pick, obviously.

Senator **WIRTH**. That is not consistent. If your assumptions in all of your models are that the price of oil is going to be 50 percent higher than the suggested floor price. . . . Anyway, we will have a chance to back to this.

A final note, if I might, Mr. Chairman, for the record, could you provide to us—and maybe Henson or Linda this is something for you—could you provide for us a comparison of the proposal that you all have made in the National Energy Strategy for alternative fueled vehicles with the initial proposal made by the President in June of 1989 under the Clean Air Act.

How do those two compare? Are you picking up on that proposal? Is it less? Is it greater? How does it differ and so on? That would be very helpful at least to this member of the committee.

Secretary WATKINS. Senator, we would be happy to do it. At the outset, we will do some thinking about it. We think the proposal is greater in the sense that the Clean Air Act was talking about nonattainment areas. The alternative fuels initiatives in the Strategy is talking about fleets of 20 or more vehicles anywhere in the country.

Senator WIRTH. Do you remember that the President's Clean Air bill had a requirement for a million alternate-fueled vehicles by 1998 or 1999. That was the initial proposal of the President in June of 1989. And in the process, the President backed off of that unhappily.

It was, in my opinion, a very enlightened proposal. And there are many of us who would like to encourage and maybe get back to that proposal in order to encourage alternative fuels, natural gas-powered vehicles in the short term, electric vehicles in the long term, in line with the initiatives that you all have been so good on.

Secretary WATKINS. We will furnish that for the record, Senator.

[Subsequent to the hearing the Department of Energy submitted the following:]

The President's proposed Clean Air Act Amendments of 1989 (June 1989) would have required that, in the nine worst ozone nonattainment areas, 500,000 alternative fuel vehicles be purchased by 1995, growing to 1 million vehicles by 1997. In addition, this proposal would have mandated alternative fuel availability and use to insure that the expected clean air benefits of these vehicles were realized. It was intended that these vehicles would have been sold to the general public. The covered vehicles were automobiles and light trucks.

The NES alternative fuel proposal would require that certain fleet operators purchase some alternative fuel vehicles in 1995 (10%) with increasing purchase requirements through 2000 and thereafter (90%). The covered vehicles include cars, trucks and buses with certain exclusions (e.g. rental cars, over the road trucks, emergency vehicles). This program does not require purchase of vehicles by the general public. In addition, this program would not mandate fuel availability and use.

In terms of the number of vehicles that would be purchased in response to the program, the original Clean Air Act proposal would have required substantially higher purchases of alternative fueled vehicles in 1995 and 1996. However, by 2000, the programs would require about the same number of vehicles.

The CHAIRMAN. Thank you, Senator Wirth.

Senator Craig.

Senator CRAIG. Thank you very much, Mr. Chairman. Admiral, again, I worked my way through your documents, and I think out of all of this, you have put together a series of resources now, an accumulative center of resources for analysis that will be extremely valuable as this committee begins to work its will.

And although we may agree or disagree on some of your assumptions or proposals, the thing I think that excites me most is that you have spent a good long while amassing some modeling that I think I and others have to believe has some validity to it that is extremely important for all of us in analysis.

One of the most difficult things, I think, when we begin to try to deal with something that has been largely and historically market driven, is how do we dedicate public resource that ultimately drives private resource that gets us to where we want to get, taking into consideration all of those anomalies of the market. And hopefully, that modeling that you have worked on and that you are now relying on will demonstrate that.

One of the things that you will hear from me in days to come and hopefully years to come, as we work our will in crafting policy that drives the market, in part, is a question of nuclear power. And it has been my concern, you have heard it expressed by others, and clearly, your goals and approaches that you have documented in this proposal target some of those key things, from the ability to deal with licensing and licensing process, the ability to deal with waste, and all that that means in public perception and acceptance, as we maintain, I would like to see us even go beyond the 20 percent mix factor in the total energy package.

One of the things that I look at and will be looking at most critically as it relates to the ability of my State to be a participant as I think all of us would like to be in this, seeing the value of it in a variety of ways, is the role that our laboratory out in Idaho plays, and the importance of that laboratory, and the kind of technology that is developed there, and one of those approaches you mentioned, Admiral, is the accelerated, to accelerate introduction of advance design in nuclear power plants.

We are all aware of the effort underway and the switch in the Department's policy based on budget. That is now obvious, and I will not argue with you or debate with you the value of that. I understand the budgetary requirements and concerns.

But in all of that kind of thing that is going on, I wanted to ask of you your thoughts as it relates to roles played and areas of participation. I think you are very aware, right now, the kind of controversy that is going on in my State that involves DOE and the relationship that it has with a particular utility in Colorado, and the ability to do advance research toward advance design, and all that is involved in that at this moment.

I guess my greatest concern is the reaction of people like yourself and the agency as it relates to that relationship that exists between a State and a Federal agency, and the difficulties that that relationship now has in the State of Idaho.

First of all I would like your general comments on that as it relates to the research, the R&D, the corps from the St. Vrain, and that relationship.

Secretary WATKINS. Senator Craig, I think that is probably the Achilles heel of nuclear power for the future. In other words, if we decide there must be a political bias against it, and we are thwarted by States who passed laws in defiance of the laws passed by the Congress that I am supposed to execute, such as we have in the State of Nevada, and we have the "not in my backyard" and "if I do not generate the waste, I am not going to allow it to be buried in my State." That kind of rhetoric now is not in the national interest.

In the particular case in Idaho, I think it is very unfortunate that the rhetoric has built up now. Waste movement in a number of areas, including transeuranics, of which there is a lot stored out there in Idaho, are getting all mixed up with research at the Idaho National Engineering Laboratory and with the Fort St. Vrain fuel disposal and how it is going to be used in research for the high temperature gas cooled reactor and so forth.

The unfortunate part about that kind of rhetoric, when it comes out now, at a time when we are running an environmental impact study on what technology should we have for high temperature gas cooled or heavy water for the defense side of it. And even though that is on the defense side, it has a spin-off into the commercial energy side.

So when we hear that debate and all of the tough rhetoric against the Department of Energy, calling us liars and one thing and another, it does not set too well when you have to make a decision, all other things equal, in an EIS, when it comes down to the wire. What is the technology? Will it be heavy water or will it be high temperature gas cooled, because we have already made the decision, it is only going to be one technology on record of decision.

And right after that record of decision is made on the technology, we select the site. Now, we are welcome with open arms at one of the other sites today and they are starting the drum beat, that we are not tied to a technology. We want to do our job for defense of the United States. We have done it for years. We are proud of it and we want to do it. Which one would you go to if you were the Secretary of Energy?

So it is unfortunate that you cannot have it both ways. If you want the $60 million for the high temperature gas cooled reactor research with the Fort St. Vrain fuel, then let us get on with it. And if we do not, and we continue the rhetoric, then that is going to be factored into the public statements. Because remember, the EIS is a very open process. The public statements are made and it is all filed in the record. Certainly, as the Secretary of Energy, I am not going to want to put something in a State that is constantly fighting us in the court with a litigious relationship such as we now have in Nevada.

We do not have it anywhere else except Nevada today, and I hate to see Idaho, a great friend of defense over all these years, all of a sudden change its posture, even though I recognize that much of the rhetoric that Governor Andrus heaps on us, frankly, has been beneficial in ways.

He has said, I am not going to take any transuranics until you are ready to open the waste isolation pilot plant. I think that was good pressure. We were getting it from seven States. We were not doing our job right at that time. We are just about to open the waste isolation pilot plant for research this summer and it seems to me that we have dedicated ourselves to doing this responsibly. Now is not the time to ping on us during the EIS process because that is now a matter of record. I think it hurts Idaho, if in fact, down stream you want to have a crack at getting one of those technologies sited there.

Senator CRAIG. Well, I appreciate those comments, Admiral. That certainly has been the concern of a good many of us, that the issues need to be divided and clarified. And let me say that I would trust that we could maintain some dialogue as we move in this process. I understand there is a litigation process that is underway that may or may not head us in certain directions. But dialogue and understanding is going to be critically important.

And speaking of that——

Senator **Wallop**. Can I say to my friend, you have one more question and then the time is up. But I would say that if Idaho does not want such an installation, that Wyoming, I think would dearly welcome a billion dollars a year and 13,000 high-paying jobs, mostly Ph.D.'s. So if it gets too tough, Admiral, come and talk to me.

Senator **Craig**. And Admiral, I would ask you to strike that from your memory bank.

[Laughter.]

Senator **Craig**. I guess I would like to take note of a concern about reports that I hear over the concept of corps labs or the restructuring of national labs, Admiral. And I guess I would like someone from DOE and maybe this is not the time and place, to meet with me and my staff in the coming week or so to get more involved in this kind of a discussion.

I think one of the things that is of real concern to me and to this committee, because we recognize the tremendous resource we have in our national labs as it relates to the diversity that you talk about right here in your report, and the ability to extend science and technology well beyond where we are in our current imagination at the time, is that we be able to maintain that kind of diversity, extremely important to our future energy needs, and to allow that kind of technological transfer that maybe only we, we collectively, the Government can push the outer envelope of that kind of research. And that diversity is important.

So my concern is that we do not narrow our perspective too much. And out of that I would like to know what is meant by that kind of rhetoric and ultimately what kind of direction that rhetoric is driving at.

Secretary **Watkins**. We share the same goals, Senator Craig, so it is not a matter that we are interested at all in a decline in our national laboratories. Quite the contrary. The reason we are conducting the study in the Secretary of Energy Advisory Board is because we have to face the Defense Department's reality of a decreased budget.

In our weapons laboratories, three major weapons laboratories, for instance, when we cut SDI by $1 billion, we lose 800 scientists. Now those 800 scientists are not just doing the Strategic Defense Initiative work. They are doing basic research.

There is a tendency not to recognize that what goes on in basic research is relatively independent of say, a nuclear bomb or something else. It is very fundamental. Some of the things that have come out of our nuclear weapons laboratory have been humane genome research, the whole genome mapping. That is a result of ionizing effects of radiation studies done at our national laboratories in defense. We have some incredible work that has come out in medicine, out of the basic research work.

So, we are trying to preserve our national laboratories and make sure we do not do something silly programmatically that drives them out of business when we have a lot of fundamental research work to do that now we are farming out elsewhere where we can best do it in the national laboratories. We have the finest equipment and scientists in the world. So that is why we are doing the study.

We are worried that as we come down in the nuclear arsenal, which is our objective, that we do not throw out scientists doing basic research, willy-nilly. And that is what we have been doing. So we have got to be very cautious.

So in the whole reconfiguration of our nuclear weapons complex, you will see different percentages of the current stockpile needs, and every time you reach certain plateaus, you have to very seriously question whether you can maintain the infrastructure that you have today without being taken to task by the American taxpayers through the Congress.

So we are very, very sensitive to that and we are trying to now migrate some of our attention into other areas, such as environmental restoration and waste management, such as in transfer of technology so we can pull out of defense laboratories that very high classification stuff, parts of which have market pull and have nothing to do with classification.

We kept ceramic engines covered in the cruise missile program for so many years that we lost out to foreign competitors with our own technology and it has been a terrible mistake. We do it all the time. So we are trying to change all that.

So we have a lot of good things going in studying what would otherwise be the demise of our national laboratories if we are not very careful to protect that very, very special jewel in our crown, and INEL is one of those laboratories.

So, I want to make it clear for the record, that the idea of the study is not to find cost-effective means of cutting laboratories but find good, solid means of moving work into the basic research entity called our national laboratory, which is so powerful and could give this Nation a real boost in areas that right now we are deficient in, such as the ones I mentioned, environmental restoration and waste management.

We have not even tasked those laboratories until this past year, to get into the act. And when you tell those scientists, I want to solve that problem at Weldon Springs in Missouri, they will do it and they will do it in a hurry and a lot cheaper than we have in our 5-year program now. That is what we are starting to do, and that means more scientists to offset the decline that we would otherwise have. INEL is, of course, one of our top laboratories and I do not see any indication it is going to stay anywhere but right up at the top.

Senator WALLOP. I want to inform the witnesses that there are only two left to question. There is becoming a problem in waste management, at least at the dias, and I suspect at the witness table, too. For whatever that is worth.

Senator Seymour.

STATEMENT OF HON. JOHN SEYMOUR, U.S. SENATOR FROM CALIFORNIA

Senator SEYMOUR. Thank you, Mr. Chairman. And I recognize the waste I am about to spill.

Being the newest member, it is only fitting that I be the last member to ask questions. And I will try to make it brief, Mr. Chairman.

I would like, Mr. Chairman, to ensure that a statement that I had wanted to make, but wanting to save time did not, would be part of the record.

[The prepared statement of Senator Seymour follows:]

PREPARED STATEMENT OF HON. JOHN SEYMOUR, U.S. SENATOR FROM CALIFORNIA

Mr. Chairman, I wish to join you and my colleagues in welcoming Secretary Watkins to this hearing today. I congratulate him and his staff for all of their work to provide this country with a systematic, multi-front energy policy. Furthermore, I applaud the central theme of the National Energy Strategy—the imperative to reduce our vulnerability to unstable, offshore oil sources and the unpredictable prices they demand without imposing new taxes on the American people or discounting the need for protecting the environment.

In this regard, I am pleased with those proposals of the NES accelerating research and cooperative private sector programs on alternative fuels for transportation, utilities, and buildings. America has more than reserves of oil underneath its vast landmass; it also has reserves of scientists, entrepreneurs, and consumers who stand prepared to harness fossil fuels, fusion technologies, renewable products, and several other clean energy sources that can sustain our economy.

Yet despite my enthusiasm this morning, I remain concerned about the section of the National Energy Policy that opens the possibility for Outer Continental Shelf drilling and extraction programs possibly starting in the late 1990's.

Given the Energy Department's own goal to decrease America's dependence on foreign petroleum producers, the vast supply potential offered by inland tracts of heavy oil, the low cost and overall effectiveness of well-planned conservation programs, and the promise of alternative fuels, I believe that OCS drilling is unnecessary and shortsighted.

Last June, President Bush recognized these facts by suspending any OCS leasing activity on East and West Coast areas for a decade—a decade that, as many aspects of the strategy before us outline, could be the one of America's energy rebirth.

During this session of Congress, we must commit ourselves to developing those untapped treasures of the laboratory, the air, the sun, and our earth that can bring affordable, home-grown supplies of energy to all Americans without threatening the environment in which they live.

The National Energy Strategy represents a start in the right direction, and I look forward to cooperating with Secretary Watkins and my fellow Committee members on this critical policy during the challenging months ahead.

Thank you, Mr. Chairman.

Senator SEYMOUR. Mr. Secretary, I will be quick and I do not think I will be too dirty. But there are some questions that I have.

Let me say firstly, that I admire your commitment to the strategy. I know that you have and will work in the future as you worked with this committee and I have the opportunity to work with you, achieve a balanced proposal.

And in the balancing act there are three areas really today that I would briefly touch on.

Number one has to do with my State of California, more specifically the leasing of the naval petroleum reserve at Elk Hills. And you have a proposal to lease those facilities and to share a portion of the revenues with the State of California.

California has a few outstanding concerns relative to the draft bill by the Department of Energy this year. And I hopeful that we will be able to work with you and you with us in mitigating, eliminating those concerns.

Secretary Watkins. We will commit ourselves to get together with you, Senator Seymour, and try to work that out.

Senator Seymour. Very good. Thank you.

Secondly, having to do with the Outer Continental Shelf, where you and I may respectfully differ, but in that regard, Mr. Secretary, you will remember the President announced last June a 10-year exemption from leasing of certain Outer Continental Shelf areas in the North Atlantic, Eastern Gulf of Mexico region, Washington State, Oregon, and of course, California.

You will also recall that that announcement identified 87 potential OCS tracts in Southern California on which no drilling activities could occur before 1966.

My question is, would the OCS program that you recommend here on page 80 that you would be recommending that the Secretary of the Interior invalidate in any way, shape, or form the President's commitment in his June 1990 directive prohibiting lease?

Secretary Watkins. No, sir, it would not.

Senator Seymour. Very good.

Secretary Watkins. When we say targeted areas, it would be those areas that might now either be open for lease or might be contained in the annual moratoria imposed by Congress and the areas not proscribed by the President in his policy set last year.

Senator Seymour. And would the OCS program that the NES recommends to the Secretary of the Interior include the 87 tracts as you talk about on page 80?

Secretary Watkins. I do not have the answer to that, Senator Seymour. I am not sure. I will have to give you that answer for the record.

Senator Seymour. Well, these are the 87 tracts the President deferred leasing on until 1996. And let me just say, Mr. Secretary, on those specific tracts and your recommendations to the Secretary of Interior, as they apply, I would be hopeful that in fact that does not lead to OCS drilling.

And I would just share with you right up front and very straightforwardly that should it, I am going to do all that I can as a member of this committee, as a member of the United States Senate to ensure that drilling does not take place on those tracts.

Secretary Watkins. I think Ms. Stuntz has the answer, Senator Seymour.

Ms. Stuntz. Nothing that we would propose would in any way affect what the President's determinations were last year, including on those specific tracts.

Senator Seymour. I guess my concern is on these particular 87 tracts that it may be, and I cannot tell from reading about it in your report here, but it may be that you are going to do some environmental assessments and investigations and things like that. And that smells a bit like drilling to me or getting close to it. And that would concern me greatly.

Secretary Watkins. I was in error, Senator Seymour. What I was addressing was the 96 tracts that are in the Alaska OCS that are not proscribed. I think we have cleared that up.

Senator SEYMOUR. Relative to conservation, as you describe it in Federal Government conservation on page 71 and page 72, specifically I am interested to know, do you have any pilot programs for Federal conservation relative to the transportation element, meaning, do you have any plans, detailed plans relative to car pooling, van pooling, public mass transit for the 2 million Federal employees and probably of that about 200,000 of them in California?

Secretary WATKINS. I will ask Ms. Stuntz to answer that, Senator.

Ms. STUNTZ. Insofar as the transportation sector is concerned, which I understand to be the focus of your question, we are not addressing specifically Federal transportation efficiency in the plan. It is a provision. I knew it is addressed in Senator Wallop's and Senator Johnston's bill. We do continue to work through GSA with alternative fuel vehicles and, I believe, individual agencies have varying programs. But we do not make any generic recommendations on that in the Strategy.

Senator SEYMOUR. Well, I would hope that as we go through the months—and yes, Mr. Chairman, one more question. But I would hope that over the coming months we have the opportunity to talk at length about that because I think you are missing a big bet. We have got 2 million human beings that are one way or another transporting themselves to work, 200,000 of which are in my State. And I think there can be great efficiencies accomplished there.

Finally, on alternative fuels you have got about $16 million that you budgeted for alternative fuel development over the next fiscal year. Have you yet figured out what priority those $16 million might be invested in?

Mr. MOORE. Senator, if you will hold on one second, we will get an answer for you.

Senator SEYMOUR. Once I get that answer, Mr. Chairman, I will be out of here.

Secretary WATKINS. I think we will have to supply that for the record, Senator Seymour, we do not have the breakout of the $16 million off the top of our head.

[The information requested was not received at the time the hearing went to press:]

Ms. STUNTZ. Let me just say that it is primarily bio-fuels in which DOE is doing R&D and that is most of what that money goes for. We do have, of course, through the Alternative Motor Fuels Act of 1988, which was co-sponsored by Senator Rockefeller and Congressman Sharp, a purchase program underway to purchase alternative fuel vehicles for the Federal fleet of various types, some natural gas, some methanol. And we continue to implement that program.

Mr. MOORE. And we have a separate program working on the battery for the electric vehicle. But some of these technologies are known, it is a matter of just trying to break the gridlock between supply and demand or demand pull and getting these vehicles on the market place.

Senator SEYMOUR. Thank you very much, Mr. Secretary, Mr. Chairman.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. You can time me, and I will be brief because I have a few of mine own answers here.

First of all, let me thank you again, Admiral and Henson Moore. I am wondering, gentlemen and lady, what you are doing to attempt to put into perspective that is understandable to the general public and counter the generalizations by the national environmental community with regard to ANWR because clearly ANWR is an important part of your energy package.

How do you combat the theory that it is a 200-day supply? Or if it were larger as Mineral Management suggested, maybe a 600-day supply? If it were a 600-day supply it would be the largest field ever found in the United States. If it were a 200-day supply it would be the third largest field.

You have got charts that elaborate a lot of things, but there is a presumption out there and many of my colleagues say, hell, it is only a 200-day supply.

How do you counter the generalization that the 19 million acres of ANWR are at stake when everybody that looks at it recognizes that 8 million acres have been put in a wilderness in perpetuity and 9.5 million acres have been set aside in refuge, leaving what, 1.5 million acres in the 1002 area that you are going to lease? And that industry says the footprint, if they do find any oil there, is about 12,500 acres, which is the size of what? Dulles International Airport. That is the footprint. But we cannot get anybody to display that.

What is the proof, they say. Well, you got Endicott that came on a year ago last February at what—the 10th largest field in the United States, now it is the 7th at 120,000 barrels a day. And it uses 55 acres as the footprint.

How do you tell the public that? I assume it is an important part of your energy package.

Secretary **Watkins**. As you know, Senator Murkowski, we are very much in favor of developing the ANWR range. We think it is very, very important as we move into a transition mode to some alternative transportation fuels. But there is no question we are both going to need the oil and the revenues from the natural resources that God gave this country. We ought to do it in an environmentally sensitive way, and we think we can do that.

When people come up with those kind of simplistic numbers, what they are doing is they are saying that if you take, let us say, 4 billion barrels and you decide that the Nation is going to consume something like 17 million barrels a day and you could pump 17 million barrels a day out of the Arctic National Wildlife Refuge, you would run out quickly. Now that is the kind of simplicity that does a lot of damage in this country.

It is the same with the SPR. People say we only have 60 days, so what good is it, you know it is not going to last that long. We are not talking about all other oil flow from the United States and from other countries and from the stable regions of the world. We are not saying that is all stopping for some magical reason. This is a worldwide fungible commodity.

I think if people will look in the executive summary and see this very impressive chart 9figure 1) that shows the worldwide movement of oil and what this means to the economies of the world, our allies, our friends around the world, this is a necessary commodity for economic strength in the world.

And, therefore, we are going to need to be a player in that game to the extent we have natural resources. And we have to do it right. So I think those kind of simplistic number exchanges are worthless.

The ANWR range, when it is brought on, will be there for a long time, 20 years. I do not know. It will have a certain rate. It will be optimized for that particular field so that we do not overuse it. It is used properly.

We have pipeline issues we have to face up there, the continuation of the existing pipeline. We will have to look at that. That will be a fairly old pipeline. We have a lot of things to do, this is going to be hard work. But it can be done.

But to simplistically say that ANWR is only going to last 200 days is nonsense. And we ought to get on with exposing the kind of rational that generate those numbers. They are the kinds of things that the Chairman said we ought to stop using. Those are the comments that do a lot of damage because they are the ones that get news coverage, at least by those who feel that this is an egregious violation of the environment. We believe it is not.

Mr. MOORE. Senator, we share your frustration. We understand there is going to be a hearing this committee will have that will get more into the ANWR issue in particular and maybe we will all do a better job of really assessing how important ANWR is to the country at that time.

But just one statistic, I think, if people want to say there is only so many days of oil in ANWR, then if you look at it that way over the last 100 years over 80 percent of all the onshore fields discovered in this country had less than 1 day's oil supply in them.

And so if we just said, well, it is only 1 day of oil here, do not do it, where would we be right now? We would be importing probably in the neighborhood of 90 percent of our oil. That is just a rough guesstimate.

Senator MURKOWSKI. I appreciate your mentioning that. I think, too, as one relates to Prudhoe Bay, you know, we are going on towards 20 years here one of these days. And that was supposedly a 600-day supply and it will continue to be pumped probably for another 10 years, but it is declining at the rate of close to 10 percent a year. Unless new technology is found, we have got a problem.

But my last question, Mr. Chairman, is concerning the importance of ANWR in the success of the National Energy Strategy. Now, you are aware of the Chairman and the ranking member's bill before this committee that has been introduced, which simply put, puts ANWR as the funding mechanism for all the alternative energy technology, reclamation, and so forth.

In other words, if you pull ANWR out, which many of the environmentalists are committed to, you have no energy policy in the sense of this piece of legislation because you cannot fund it. All these things you want will never come about.

My question is I am told that these alternative energy development proposals fund at $1.7 billion. You are talking about real money. If you do not have basically a funding mechanism, why the theory is you are not going to have the $1.7 billion that we want to utilize for alternative energy research development conservation and reclamation.

In your package, tell me a little bit about how significant ANWR is in your funding mechanism or have you developed that? Does it follow pretty much the lines of the bill that is before this committee by the Chairman and ranking member? Or are you just going to go to the Treasury and hopefully dip out of there what you need for alternative technologies and reclamation?

Secretary **Watkins**. I think it is probably the most important element.

Senator **Murkowski**. The most important element?

Secretary **Watkins**. The most important element from the standpoint of how do we find all of the resources we need to apply for alternative fuels, for many of the other initiatives? How do we make this somewhat budget-neutral so that we do not face the kinds of difficulties we had to face last year on the budget deficit?

So it is critical. It is critical from that standpoint almost more than it is for the oil per se, although that is also critical.

In that regard, obviously, I recognize that our strategy states that there is no revenue sharing there.

Senator **Murkowski**. Your strategy states there is no revenue sharing there?

Secretary **Watkins**. But I can tell you also, Senator, as you know, you and I and others met with the President and discussed this very issue. And I believe this is one of the areas that we are going to have to work with you all up here in the Congress. You know, we have a lot of water to go over this dam before we have a comprehensive energy strategy that is going to come out of the Congress acceptable to both Houses here as well as the President.

So I think that is the kind of thing we are going to have to do a lot more of.

Senator **Murkowski**. You are going to have a legislative package?

Secretary **Watkins**. A legislative package will come up here consistent with the published NES. But that does not mean the end of the world, Senator. And I would hope that we would be able to find some ability to harmonize these things with your bill, with this committee's bill and with the House bill.

Senator **Murkowski**. But your legislative package that comes up is not going to pre-commit the sale of ANWR leases?

Secretary **Watkins**. I cannot predict, Senator Murkowski, how influential you have been to date. The package is not ready to come up here yet. I have not seen it in that regard. And we will have to watch it and inform you how it is going to come up. But either way, if you are not satisfied and this committee is not satisfied, obviously, we have some work to do with you up here. We will do that.

Senator **Murkowski**. Mr. Chairman, I am going to quit while I am ahead.

Senator **Wallop**. I would just make one closing observation that that thesis, for somehow or another that we would only have 4 years of energy out of ANWR is a little bit like saying I cannot eat because nothing I eat is going to sustain me for more than a week. And therefore, it is just ridiculous to go on doing this, might as well cash it in now.

Secretary **Watkins**. It is a form of energy euthanasia.

Senator **Wallop**. Thank you all very much. It has been a good morning. The committee is adjourned.

[Whereupon, at 1:15 p.m., the committee adjourned, subject to the call of the Chair.]

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